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ENGLISH FOWLS
FRENCH, POLISH, AND MISCELLANEOUS FOWLS
GAME FOWLS
MEDITERRANEAN FOWLS
BANTAM FOWLS
FOWLS OF THE PHEASANT FAMILY
DUCKS AND GEESE

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ENGLISH FOWLS

DORKING

ORIGIN

1. Although the **Dorking** fowls may have descended from the early Roman fowls of like character, evidence points to the fact that they originated among the farmers of Sussex and Surrey counties, England. It was recorded as early as 1763 that an incredible quantity of poultry was sold in the town of Dorking, and that these fowls were noted for being remarkably large and fine.

Dorking fowls are composite, in all probability deriving their size and aptitude to fatten from the large Sussex, or Surrey, fowls; their five toes and rose combs, when present, were derived from the early Roman five-toed fowls, which were crossed with the four-toed Sussex, or Surrey, fowls and produced fowls superior in size and table quality to those of almost any other breed. The composite character of fowls of this breed is perhaps the reason that so much care is required to produce them true to color, and, in many cases, uniform as to comb.

Since their development, Dorking fowls have been separated into varieties. The *Colored Dorking*, the *Silver-Gray Dorking*, and the *White Dorking* are recognized in both England and America. The English recognize, also, a *Cuckoo Dorking*. Other varieties are the *Rose-Comb Silver-Gray Dorking* and *Red Dorking*.

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COLORED DORKING

2. Origin.—The **Colored Dorking,** or, as they are commonly called, the *Dark Dorking* fowls, were developed from the common fowls that were raised plentifully in and about Sussex County, England. It is thought that fowls of the Dorking type were brought from India and crossed with the fowls bred in Sussex County. Other crosses were made between the White and the Red Dorking and the very dark Sussex fowls. Black breasts were produced in the Colored and the Silver-Gray Dorkings by crossing the Spanish with the Sussex fowls. From such crosses the tendency for Dorking fowls to develop white ear lobes was introduced.

3. Development.—From the many types of five-toed fowls so plentiful in Sussex and Surrey, the poultrymen selected and mated, first to produce fowls called the Gray, or Colored, Dorking, and later for fowls darker in plumage and known as the Dark, or Colored, Dorking. These were developed into fowls that were thrifty, active, and easily prepared for exhibition. They were said to be the most satisfactory of all fowls of the Dorking varieties, because of the fact that they were always ready for the table and needed but little preparation for the exhibition pen. They were mated for improvement, and by selection they have been made into fowls of large size. They are easily developed, and are excellent for table poultry.

4. History.—Dorking fowls and their ancestors have existed in England for centuries. They have been written of as Kent, Sussex, Surrey, and Dorking fowls. About every 50 years they have been changed so as to make them each time almost a new breed. The Colored Dorking of the present has been made since 1850, and the final development of these fowls has been completed since 1885.

5. Description.—The English Club Standards states that the general characters of the males of the Colored Dorking are as follows: The head is large, free from coarseness, and broad above the eyes; the eyes are of fairly good size; the comb is

either single or rose in the Colored Dorking, single in the Silver-Gray Dorking, and rose in the White and the Cuckoo Dorking. The single comb should be moderately large, circular in arch, and finely serrated; the rose comb should be square, moderately broad in front, and free from thumb marks, side spikes, or sprigs; the ear lobes should be moderately well developed and hang down as nearly as possible to about one-third of the depth of the wattles; the wattles should be rather short; the neck, gracefully arched, with full hackle coming well over the back, giving the neck the appearance of being very broad and tapering to the head; the body should be deep, square, and massive, as large as possible, long, rectangular in shape as viewed from the side, and tightly feathered; the breast should be deep, broad, and nicely rounded; the breastbone should be long and straight; the back, broad and level, with a full saddle, moderate in length; the saddle, broad, inclining downwards to the tail; the wings, large, carried well up and close to the body.

The tail should be full, sweeping and carried well back (a squirrel tail is objectionable); the sickles, broad and well-curved; the side hangers, broad and abundant; the thighs, large, strong, and well developed; the shanks, short, strong, round in the bone, set well apart, and free from any sign of leg feathering; the spurs, set on the upper side of the shank, turning rather upwards; the toes shall be five, round in shape, the front toes long, straight, and well spread, the fourth apart from the fifth and inclining toward the ground; the fifth, coming away distinctly from the leg, firmly set in, and nicely turned up the leg. The shape and carriage should be stately, with the breast thrown well forwards.

Cocks should weigh from 12 to 14 pounds; cockerels and hens, from 9 to 10 pounds; and pullets, from 7 to 8 pounds.

The general description of the female is: The head, comb, ear lobes, and wattles should be similar to those of the males, but proportionately smaller; the body, long, level in back, deep and massive, straight in front, broad across the cushion, and tightly feathered; the tail, well developed, with broad feathers carried closely (fan tails are objectionable); the legs and feet should be similar to those of the males, although the

spurs should not be so fully developed (the English Standard provides for spurs in the females); the shape, plump, deep, and massive; the carriage, straight and matronly. The American Standard differs from the English Standard somewhat in its wording, yet the meaning is the same. The American Standard demands single combs in both the Colored and the Silver-Gray Dorking, otherwise the shape is the same.

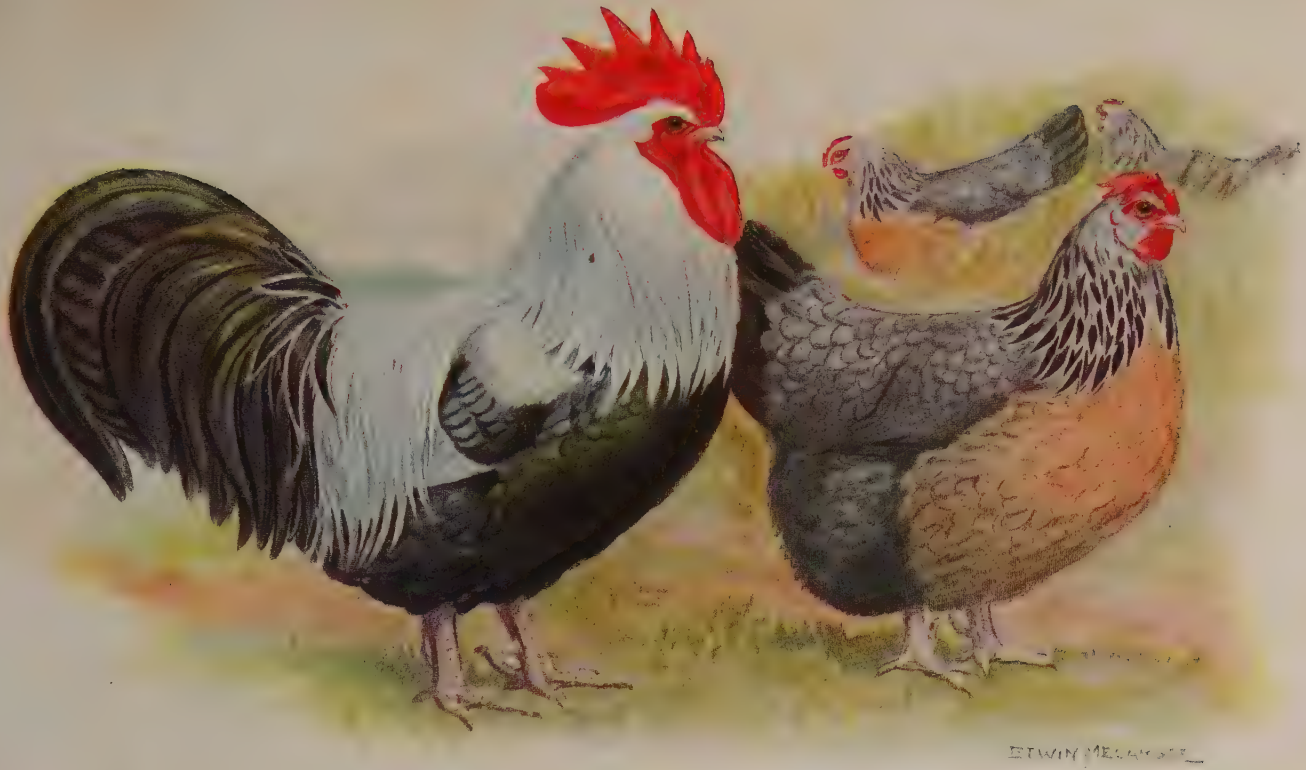
The color description of both males and females is: The comb, face, wattles, ear lobes, and eyes, bright red; the shanks, white and free from red shading or any traces of feathers; the feet, white, free from red between the toes; the toe nails, white.

On the males, the hackles should be of a light or straw color, and more or less striped with black; the saddle feathers should resemble the hackle; the back plumage should be various shades of white, light, or gray—light or straw color preferred; the wing bows, white or white striped with black or gray—straw color preferred; the wing bars, black, glossed with green; the secondaries, light on the outer web and dark on the inner web; breast and under parts, black; the tail, black, richly glossed—a small amount of white on the primary sickles is permissible, but white hangers are distinctly objectionable.

On the females, the color of the head should be dark; the hackles, pale or straw color, heavily striped with black, and having the appearance of being black and edged with straw color; the breast, dark or red salmon, each feather being tipped with black; the rest of the body, almost black or approaching a rich, dark brown, each feather being slightly pale at the edge, except on the wings, where the center of the feather is brownish gray and is covered with small, rich markings, which are surrounded by a thick lacing of the black; the feather being free from red; the tail, nearly black or rich copper color.

The American Standard describes the Colored Dorking as a fowl of lighter color than the English Standard does. Otherwise the two descriptions are similar. The under plumage of the Colored Dorking should be dark.

6. Mating.—In mating Colored Dorking fowls for the production of exhibition offspring, fowls of large size and that



Silver-Gray Dorkings

have the proper shape, color, and markings, according to the description, must be selected. The most successful breeders select a male of a light straw color—some say the male should be almost white in top color. This light color should be tipped and striped with black or gray. All breeders object to using males that come from the Silver-Gray Dorkings, the lightest males that can be produced from the Colored Dorkings being preferred. Such males should be mated with females that conform to Standard demands. Special attention should be given to having the comb and head points of both sexes regular; the ear lobes should be red; the shanks and toes should be almost as white as chalk. The best colored shanks are usually produced by breeding from males of the lightest plumage color that occurs in the Colored Dorkings. Males dark in the hackle and top color frequently produce offspring with dark shanks. The best exhibition offspring always come from such matings. Many fanciers breed light and dark-colored Dorkings promiscuously, and select the best from those produced. The scientific breeder establishes a strain in this variety as carefully as in other varieties. In some localities of England strains of Colored Dorkings may be found that have been bred in line for more than 50 years.

SILVER-GRAY DORKING

7. Origin.—The originals from which the **Silver-Gray Dorking** has descended were the light-colored Dorking fowls of early days, then known as the Gray, or Colored, Dorking. Dorking fowls having the light-gray shade of plumage were selected and bred for producing a variety much lighter in plumage than the Colored Dorking. To improve the light-colored plumage, a cross was made with fowls of a strain of very large Silver Duckwing Game fowls. From the offspring thus produced, a type of Dorking was bred that had plumage like the Silver-Gray Dorking of the present.

8. Development.—The Silver-Gray Dorking has been developed from the Duckwing Game-Dorking cross into one

of the most beautiful kinds of exhibition poultry, and for this purpose the fowls are preferred by fanciers over those of all other varieties of Dorkings. For a long time the Silver-Gray Dorking was smaller than the Colored Dorking, but much improvement has been made, and now the size of the former is almost equal to that of the latter.

9. History.—The history of the Silver-Gray Dorking differs but little from that of the Colored Dorking. The fowls of both varieties originated from the same source, and they have been bred along different lines only as to color.

10. Description.—The general breed characters of the Silver-Gray Dorking are the same as described for the Colored Dorking. In plumage, the male must have pure white top color, but a few of the lower feathers of the neck hackle may be marked with gray; the saddle should be pure white, without striping; the wing bars, black, glossed with sheen; the primaries, black on the upper web, light on the lower web; the secondaries, white on the outer web and black on the inner web; with a black spot at the end of each feather; the wing bays, white; the breast and upper parts, black, free from white mottlings or foreign color of any kind, but in old fowls, a slight mottling on the thighs and abdomen is permissible; the tail, black and free from white; the sickles, broad and glossed with sheen; the lesser coverts, edged with white.

In the females, the head and hackle plumage should be silvery white, centered or marked with black; the breast, salmon red, shading to an ashy gray on the thighs; the back, wings, and upper body, silvery gray, finely penciled or stippled with darker gray; the tail, a darker gray than the body plumage; the primaries of the wing, dark; the secondaries, dark on the upper web and gray on the lower web; the flights are frequently powdered with gray.

The under plumage of both males and females should be dark gray or slate; the shanks and toes, white; the comb, face, eyes, ear lobes, and wattles, red.

Silver-Gray Dorking cocks should weigh 8 pounds; cockerels, 7 pounds; hens, $6\frac{1}{2}$ pounds; pullets, $5\frac{1}{2}$ pounds. Colored

Dorking fowls average almost a pound heavier than these weights.

11. Mating.—One of the most successful breeders of Dorking fowls claims that such of the White or Silver-Gray Dorking fowls as show a yellow or lemon color in the plumage should not be used in the breeding pen. Another feature mentioned by him is that they should have short, straight legs, set wide apart and strong in bone. Special attention must also be given to selecting for breeding such fowls as do not have marked defects of comb, head points, form, or feather. From the fact that the Dorking fowls have descended from a long line of ancestors, many of which possessed features foreign to the breed, it will be necessary to watch closely for such defects, as they are apt to appear in the offspring. In mating Silver-Gray Dorking fowls, the most important thing for the breeder to have is a knowledge of the line of breeding of the fowls which he selects for breeders.

It is almost useless to attempt to breed the best exhibition type of Silver-Gray Dorking from fowls that have not been bred in line year after year for the production of a strain that will reproduce of their kind. Double matings are not necessary, but careful selection is a necessity, and unless the fowls selected for breeding have been well bred for many years, they will fail, and although they may have been properly bred, if they have not been well selected, failure will follow. Clean, clear surface color in both the males and females is needed. If the body color is silvery gray, the markings are likely to be a darker shade of gray, which gives a soft appearance to the body plumage; and if the body color is dark gray, stippled with a darker color, the fowl will have a smutty appearance and will be undesirable for exhibition purposes or for breeding for the production of market poultry. Select fowls of clean, clear colors according to the directions of the Standard, and mate, select, and remate, always using the largest females for producing eggs for hatching.

WHITE DORKING

12. Origin.—There seems to be no reason for doubting that the **White Dorking** and the Red Dorking of early times were the purest bred of any fowls of the Dorking family. Some believe that the fowls of both of the original Dorking varieties, the White and the Red, had rose combs, and that a rose comb was a true character of the original Dorking fowls. The rose comb has continued with the White Dorking; it is not now bred with any other kind of comb. It has been conjectured that at one time the White Dorking fowls were strengthened by crossing them with those of other breeds, and that as a result both rose combs and single combs were found in the offspring. The single-comb type, however, has been discarded, and the rose comb has been almost as well established in the White Dorking as in the Hamburg.

13. Development.—Illustrations of white Dorking fowls of more than a century ago show them as having the appearance of large white Leghorn fowls, with rose combs, five toes, and a slight indication of a tuft of feathers growing on the head just back of the comb. Imagine this as the original Dorking and it will be possible to realize what has been accomplished as the result of many years of careful breeding and selecting for size and market qualities.

14. History.—In the year 35, Columella advised the Romans to avoid the white varieties of fowls, because they were less robust than those of the red varieties. As this was the condition of the white Dorking fowls when they were first taken to England, years had to be spent in improving them in size and vitality. It is claimed that they were crossed with game fowls, and the statement is made that some of them, even at the present time, lay eggs having a slightly tinted shell. They have been crossed with light-colored offspring from Silver-Gray Dorkings, which had white under plumage and white markings in the plumage of the breast and body. Thus they have been built up from fowls that were condemned on account of being of delicate constitution to fowls that are

White Dorkings

of large size, good vitality, and true to breed characters, including the rose comb.

15. Description.—White Dorking fowls should conform in size and shape to those of the other Dorking varieties. In size, they range one-half pound lighter than the Silver-Gray Dorkings. Though, according to the demands of the Standard, the White Dorking should have the same breed characters as other Dorkings, the fowls of this variety really do not conform in shape to those of the other varieties. A few White Dorking fowls have been bred that rival those of other varieties in breed characters, but in general they do not equal them. The beak, shanks, and toes of this variety are white; the eyes, comb, face, wattles, and ear lobes, red. The English Standard describes the eyes as having bright-red or yellow irises, the former preferred. The plumage is white throughout, as pure and clean as possible, and without the least shading of foreign color of any kind; the comb is rose, more like the comb of the Hamburg than that of the Rose-Comb White Leghorn or of the Wyandotte.

16. Mating.—In selecting fowls from which to breed White Dorking fowls of exhibition quality, males and females most nearly perfect in size, shape, and color should be taken for mating. Hens of large size are always to be preferred. The plumage should be white to the skin, including the quills, and the skin also should be white. To be successful in breeding White Dorking fowls, a strain must be well established according to the rules of the mating-chart system, and new blood should be frequently introduced through hens of the finest quality that have been selected from strains well known as producers of the best type of Dorkings.

NON-STANDARD VARIETIES OF DORKING

17. Three varieties of Dorking fowls will be considered as non-standard, and, although one of them is described in the English Club Standards, none is listed in the American Standard. These are the *Cuckoo*, the *Rose-Comb Silver-Gray*, and the *Red Dorking*. The last, though one of the oldest, if not the oldest, variety of five-toed fowls, has never been recognized as a standard variety.

CUCKOO DORKING

18. Origin.—The **Cuckoo Dorking** has been bred but little outside of the Surrey districts. The fowls of this variety have undoubtedly resulted from the promiscuous intermingling of White Dorkings with other fowls that have rose combs and black plumage. Cuckoo Dorking fowls were brought into New Jersey very early, and some claim that they were the originals from which the American Dominique fowls have descended. Though a few writers have mentioned the existence of Cuckoo Dorking fowls, some have considered them as identical with the Scotch Gray fowls.

19. Development.—Cuckoo Dorking fowls have never been developed beyond ordinary quality. They have existed in and about Surrey, England, and are as apt to have four toes as five. Their existence may be attributed to the fact that cuckoo color or the barred color of dark and light, the same as that found in the Barred Plymouth Rock, develops in almost every locality where white-plumaged and black-plumaged fowls are kept. Though Cuckoo Dorking fowls are recognized in England, and are described as fowls having fairly good breed characters in conformity to the Standard description of the Dorking breed, and colored like the Barred Plymouth Rock, they have never been encouraged in America.

20. Mating.—In mating Cuckoo Dorking fowls, only the best should be selected and mated and remated until size, shape, and color have been well established. The Dorking

requirements will be the same in this as in the other varieties. To breed them true to color, the same method must be followed as in mating Barred Plymouth Rock fowls.

ROSE-COMB SILVER-GRAY DORKING

21. Both rose and single combs existed in the Silver-Gray Dorking of the early days. The **Rose-Comb Silver-Gray Dorking** variety of fowls has never been encouraged in America, and it has received less and less attention each year in other countries. To breed fowls of this variety, a selection must be made for size, shape, and color like that of the Silver-Gray Dorking, and the fowls so selected must have rose combs. Mate and remate these fowls until a strain has been well established. Silver-Gray Dorking fowls with rose combs may be secured in England.

RED DORKING

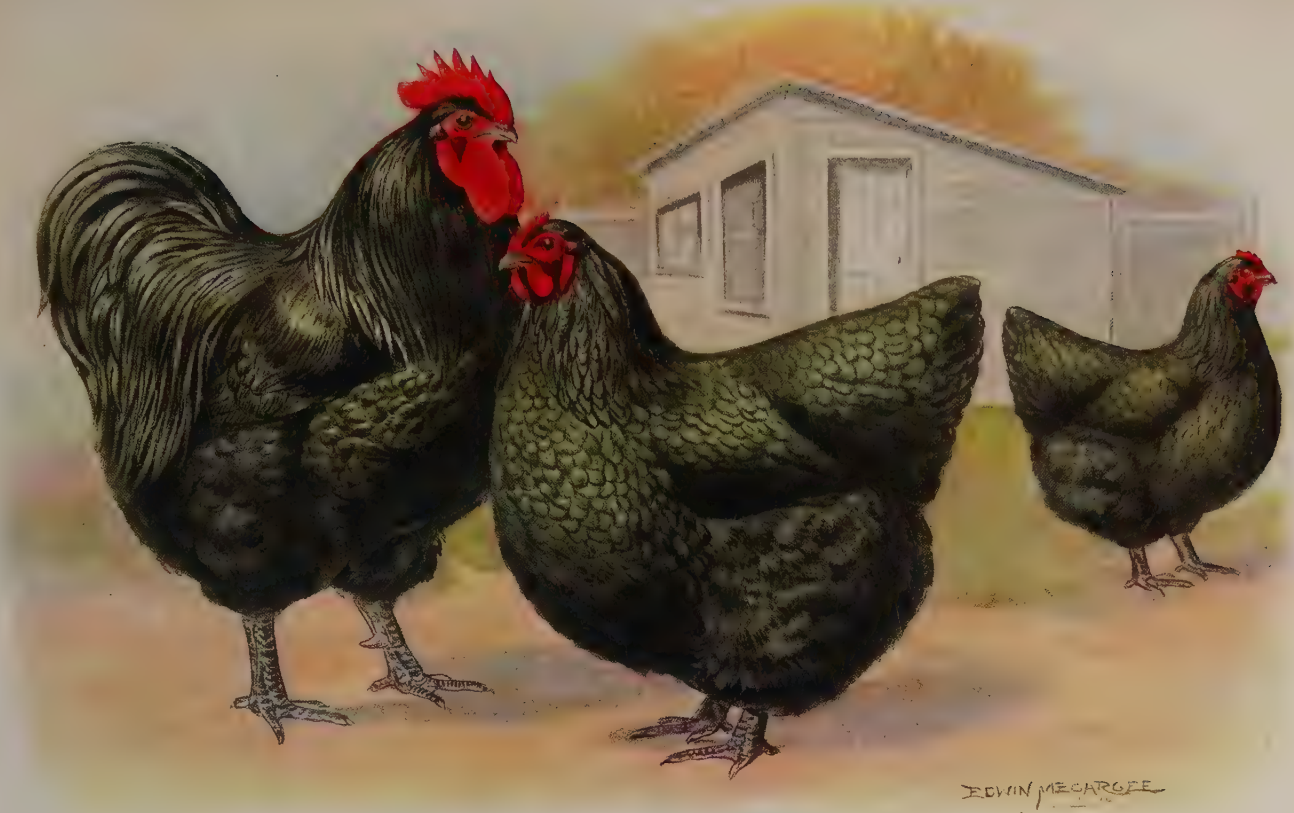
22. Origin.—The red and white varieties of Dorking were the first of the kind that existed. The **Red Dorking** was bred in the southern part of England, and although fowls of this variety have never been so generally encouraged as those of the other varieties, they have continued to exist.

23. Development.—Red Dorking fowls have not been developed in the same sense as the other varieties, but they are now receiving more attention than formerly.

24. History.—The history of the Red Dorking is embodied in the history of the other varieties except so far as the fowls of this variety have been bred in America. Some of them were brought to the United States about 1902 and were bred in New Jersey, on the same farm where some Silver-Gray Dorking fowls were bred, for the purpose of testing the utility qualities of both varieties. The Red Dorking fowls were found to be more vigorous, to lay more eggs, to lay a greater percentage of fertile eggs, and to produce chicks that were more sturdy than the chicks from the Silver-Gray Dorkings.

25. Description.—Red Dorking males are, in general form, quite like other Dorkings, with the exception that they stand more upright. Their plumage is about the same color as that of the Black-Breasted Red Game fowls, except that the color is deep reddish brown rather than rich, brilliant red. Their shanks are slightly tinged with yellow, some showing red lines down the inside. In writing of them, Harry Hamlin, of Haxted Mills, Edenbridge, England, says: "The male has a beautiful deep-red hackle; single comb; breast and tail, black; shanks, very short. The shanks of fine specimens are $3\frac{1}{2}$ inches from above the juncture of the fifth toe with the shank to the hock joint. Males weigh about 10 pounds. The hens have close-fitting plumage of a brown-red color." The yellow tinge is thought to have come from the early influence of the game fowls. Those seen in America conform generally to this description, except that the breast of the male is shaded with reddish brown and some of the females are as dark red as the favored color of the Rhode Island Red pullets, and some of them have a yellowish-brown color; the tails are black, bronzed with a reddish cast, and the main flights are edged or marked with black.

26. Mating.—It is almost impossible to outline a system of mating for the fowls of this variety. The rule followed by those who breed them is to select the best, following Dorking breed characters for shape and color as previously described, and selecting fowls of large size that have long bodies and considerable length of breast, with great width between the thighs.



Black Orpingtons

ORPINGTON

ORIGIN

27. William Cook, of England, who originated the **Orpington,** said that when he decided to form the breed he began to look for suitable material among fowls noted for egg production, table qualities, vitality, and strength of constitution. From the Black Minorca, which had red ear lobes, he selected the best males and mated them with Black Plymouth Rock females, which were sports from the American Barred Plymouth Rock. From this cross, pullets of good shape and color were produced, but the cockerels were of a mixed straw color and were useless. He mated the black pullets so produced with Black Langshan males of the old, short-legged type.

The one difference in origin between the original Single-Comb Black Orpington and its companion, the Rose-Comb Black Orpington, is that the latter, instead of being produced as mentioned above for the Single-Comb Black Orpington, was produced by mating Rose-Comb Black Langshan males with females from the Black Minorca and Black Plymouth Rock cross. Since the original Orpington was brought to the attention of poultrymen, many varieties have appeared. All seem to have come from different sources, and each variety has been changed materially from its original type.

BLACK ORPINGTON

28. Origin.—Mr. Cook was the first to conceive the idea of uniting the blood of the Mediterranean, the Asiatic, and the American breeds and making a large fowl that would be attractive for exhibition and profitable for market purposes. That he succeeded cannot be denied. Nevertheless, the Orpington

of the present has been so thoroughly modernized as to change it into a type different from the originals. The first Orpington fowls were of Langshan type rather than like the present Orpington, and had single combs. To modernize them, or to bring them within the scope of the present breed characters, it is thought that the original type of Langshan, having no feathers on the shanks or toes, was used. The late Lewis Wright, of England, claimed that this type of fowl was called Java in America, and was used in creating the original Plymouth Rock, and that the same kind of fowl was crossed into the original Orpington fowls to modify the type, to shorten their legs, and to increase their size.

The modern **Black Orpington** was first shown in 1891, and it was claimed that the fowls of this variety were produced without using any of the original breed. Investigation has shown that they have come from intermingling the blood of the original Black Orpington with Asiatic fowls of large size that had black shanks and plumage.

29. The Rose-Comb Black Orpington came originally from the same foundation stock as the Single-Comb Black Orpington, except that fowls having rose combs instead of single combs were used. The Rose-Comb Black Orpington fowls first brought to America were better in breed characters, modern type considered, than the Single-Comb Black Orpington fowls were during the same period.

30. Development.—When Single-Comb Black Orpington fowls were first introduced, fault was found with them because they were not a distinctive breed, but were modified Langshans, having no feathers on the shanks or toes. To overcome this objection, the Rose-Comb Black Orpington was made and developed into more of an Asiatic type than the single-comb variety. Later, development was made by selection. Fowls of the most pleasing character were selected and mated for the production of better form and color. Thus, the two varieties of Black Orpington fowls were developed.

31. History.—Following the creation of Black Orpington fowls, marked interest was shown in them by the poultry-

men of England. They followed the example of the originator and by the combined effort of many fanciers, ten varieties have been created. The first Black Orpington fowls brought to America are thought to have come to Massachusetts in 1891. Later, more of the same kind were brought into the United States and Canada. In 1903, Mr. Cook brought Orpington fowls to America and exhibited them at the leading shows. Following this, the Single-Comb Buff Orpington became popular in America and was admitted to the American Standard of 1906. The Single-Comb Black and the Single-Comb White Orpingtons have since been admitted. No fowls except those of the American breeds have ever been so well received in America as the Orpington, and none have been more carefully bred either in England or in America. The outcome is a breed of fowls attractive in form, beautiful in color, and highly considered as market poultry.

32. Description.—Although both the English and American Standards describe the same shape for all Orpington fowls, yet all varieties do not possess the same breed characters; in a general way, the best of each variety are of a distinctive type, which should be more generally cultivated. The body should have good length, breadth, and depth, conforming to the body of the best type of Embden geese, which is described as being canoe shaped, that is, as being long and deep, wide between the thighs, and turning up before and behind in a graceful curve, suggestive of an abundance of desirable meat and a capacity for consuming much feed and transforming it into eggs.

The Orpington male is described as a fowl of medium size; the head is small, neat, and well rounded over the skull; the eyes, full and bright; and the combs, single or rose, according to the variety. The single comb must be of medium size, well formed, and evenly serrated; it must have five points, and be evenly poised on the head—too large a comb is objectionable. The rose comb should be of the same character as the Hamburg comb, with the exception that it should not be so extended. It must be free from thumb marks or inden-

tations, wider before than behind, and have a distinctive point at the end, not so long, however, as the spike of the Hamburg comb; it must follow the shape of the head and not stand out behind like the comb of the Hamburg. The rose comb of the modern type of Orpington is more like that of the Wyandotte than of the Hamburg. The ear lobes should be of medium size; the neck, rather short and nicely curved, with long, flowing hackle; the breast, full, broad, deep, and carried well forwards; the breastbone, long and prominent. There should be plenty of width between the thighs. The back should be rather short in comparison with the breast; the saddle should rise from the middle of the back, and this together with the long, flowing hackle, gives the back a shortened appearance. The wings should be round, well formed, and carried close to the body. The English Standard states that the skin should be thin and white, and the flesh pinkish white. The tail should be of medium size, inclined to a low carriage, as in the Cochin, rather than to an erect carriage, as in the Langshan; an angle of 45 degrees is about correct. The thighs should be short and heavy; the shanks, short and strong; the toes, four in number and well spread. In the Black Orpingtons, the shanks are comparatively small for the size of the fowl.

The cocks should weigh 9 pounds; the cockerels and hens, from 8 to 8½ pounds; and the pullets, 7 pounds. Generally speaking, Orpington fowls are large and have more of the Cochin than of the American breed characters; they are not so full feathered as the Cochins, but more so than the Plymouth Rocks.

The female conforms in a general way to the description of the male. She has plumpness of form and a long breast that extends well forwards. Her back has been described as having but little cushion, yet sufficient to give a short and gracefully curved appearance. Her carriage is like that of a Plymouth Rock. Less fullness of feather in saddle and cushion is now required in the female than formerly. Her tail should be of medium size and carried like the tail of the Plymouth Rock female. Her shanks and feet should conform to those of the males.

The plumage of both males and females should be close rather than fluffy and their color should be as follows: Beak, shanks, and toes, black; bottom of feet, white; eyes, black with dark-brown iris; comb, face, wattles, and ear lobes, red; plumage, black throughout, with a rich, glistening green sheen; and color of skin, white.

33. Mating.—In mating Black Orpington fowls for the production of exhibition offspring, care must be taken to select only those that are perfect and that have been bred in line from a strain so well established as to show no traces of the Langshan cross. The dangers to be avoided are the appearance of Langshan type in the offspring and an excessive amount of cushion in the female. Large hens of such a strain should be mated with large males of the same strain that have Orpington breed characters and perfect plumage color.

The mating of males and females excessively rich in color may produce offspring having red feathers or purple barring in their plumage. To avoid this, females of less brilliant plumage should be used in the matings. Double matings are not necessary, but close attention must be given to type, body formation, and blood lines. The points needing the greatest consideration are the following: The comb, which, in both the Single- and the Rose-Comb Black Orpington, is apt to be too large; the ear lobes, which are apt to be too prominent, with white frequently showing in them, probably from the influence of the Minorcas in the original; and a too great length of leg, and a Langshan type of breast and body formation which are apt to occur and which must be guarded against. Black Orpington fowls showing Cochin type should be preferred over those showing Langshan type. Better for breeders, however, than either of these two types are fowls possessing the true breed characters of the Orpington, as shown in the color illustration. In selecting fowls for the breeding pen, choose those with this formation and with the most nearly perfect color obtainable.

BUFF ORPINGTON

34. Origin.—The first **Buff Orpington** fowls were made by William Cook, of England, who mated a Golden Spangled Hamburg male with Dorking females. Some of the offspring from this mating had reddish-brown plumage. They were selected and mated with Buff Cochin fowls with the result that the original Single-Comb Buff Orpington fowls were produced. The Rose-Comb Buff Orpington fowls were produced in the same manner by using Rose-Comb Dorking females. Other breeders selected the best of the Lincolnshire Buff fowls and mated them for the production of fowls of the Orpington type. Still others cross-bred the original Orpington fowls with Lincolnshire Buff fowls and selected and mated the offspring for the production of buff fowls having the breed characters that had been selected as proper for the Orpington.

35. Development.—It took almost 10 years to produce a Buff Orpington fit to be sent to the Dairy Show in England. Immediately after Buff Orpingtons came into public notice, they were adopted by poultrymen of England, who joined in an effort for a greater development of this variety. However, notwithstanding the improvement that has been made in this variety, there is a difference in breed characters, or body formation, between the Buff and the other varieties of Orpington. The single-comb variety has been more completely finished than the rose-comb variety. The Buff Orpington fowls generally seem to be closer feathered than the fowls of the Black and the White Orpington varieties.

36. History.—The Buff Orpington came into its own through a storm of protests. It was claimed that these fowls were only an improvement of the Lincolnshire Buff fowls and not a new breed. Some accepted them as an original variety and mingled them with the best of the Lincolnshire Buff fowls. Others added Buff Cochin blood to them, and the present type of Buff Orpington has been made by selection from offspring of all these crosses.

Buff Orpingtons

37. Description.—All Orpington fowls are required to have the same breed characters, and the shape description given for the Black Orpington will therefore apply to the Buff Orpington. As stated, however, there is more or less difference between the body formation of the Buff Orpington and that of the other varieties. The Buff Orpington differs quite as much from the other Orpington varieties as the Penciled and the Spangled Hamburgs differ from each other.

Both the Single-Comb and the Rose-Comb Buff Orpington must have the beak, shanks, and toes white or pinkish white. In some there is a tendency toward yellow or creamy white in shanks. This should be avoided. It is far better that they should have a pinkish-white shade in the shanks and toes rather than a creamy white or yellow. The eyes should be red; the plumage should be one even shade of buff throughout, free from shafting or mealiness; the top color of the males should have a glossy appearance that reflects a darker shade of color than is proper for the breast and body plumage. The plumage of the female should be one even shade of golden buff throughout—about the same shade as the breast plumage of the male. The under plumage should be buff, a shade or two lighter than the surface plumage. The color in the web of the feathers should be so dense as to prevent the lighter shade in the under plumage from showing through. The combs, whether rose or single, must conform to the description of them given in the description of the Black Orpington. Comb, face, wattles, and ear lobes in all Orpington fowls must be red and free from foreign color.

38. Mating.—In mating Buff Orpington fowls, the best results are quite as difficult to obtain as they are in any of the other buff varieties. The proper breed characters must be present in the fowls selected for mating. Hens of large size should be selected for improving size, and only fowls should be used that have been bred in line for establishing a strain of Buff Orpington fowls conforming in shape and color with the Standard description. In mating for color, the same rules must be applied that have already been given for mating Buff

Cochin fowls and the fowls of other buff varieties. The average size of the Buff Orpington does not equal that of other varieties. To improve size, the use of large hens 2 years old or older is recommended. To avoid bad results from inbreeding, the mating-chart system should be followed as closely as possible.

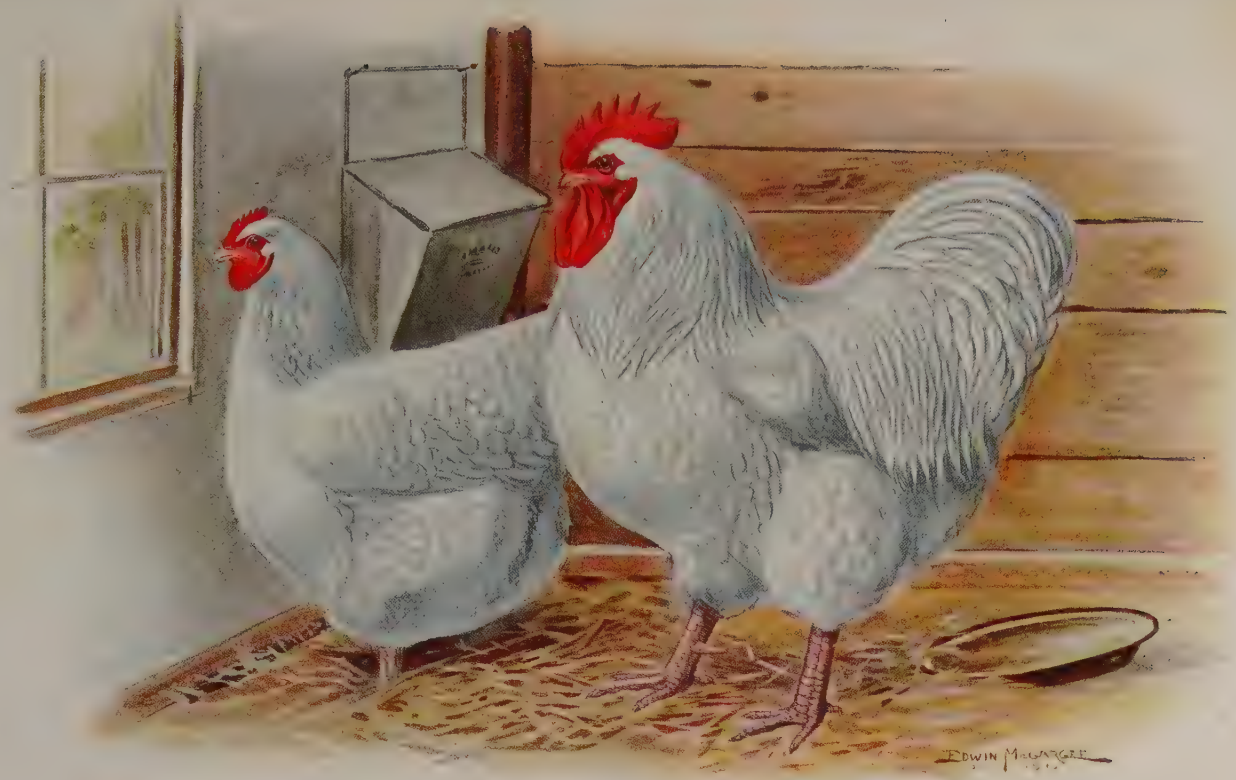
Defects to be guarded against are combs that are too large, that are apt to lop over at the heel, or that have uneven serrations, thumb marks, or side sprigs; shanks of any other color than white or pinkish white; and eyes of any other color than red or brownish red. Some Buff Orpington fowls of good quality will have shanks of a bluish tinge, and some will have yellow shanks; all such fowls should be discarded. Buff Orpington fowls having uneven colors should not be mated together; fowls having mealiness in their plumage should be discarded and only even-colored fowls should be selected. A golden buff in the surface and under plumage of Buff Orpington breeding fowls is essential in order to produce the proper buff in the offspring.

WHITE ORPINGTON

39. Origin.—There are two varieties of **White Orpington,** the rose comb and the single comb, and both are said to have been produced by crossing White Leghorn males with Black Hamburg females. The white pullets from this cross were mated with Rose-Comb White Dorking males, and some of the offspring had rose combs and some had single combs. They were separated, selected, and bred, and in this way the two varieties of White Orpington were made.

It has been claimed that White Orpingtons have also been produced by mating both Single-Comb and Rose-Comb White Dorking with White Langshan fowls; by mating white sports from Black Orpington with Single-Comb White Dorking fowls; and by intermingling with the best offspring of these crosses both close-feathered Buff and White Cochin females with the least shank and toe feathering.

40. Development.—The greatest development in the White Orpington has occurred since 1905. Prior to that time



White Orpingtons

the fowls of this variety were sparingly bred both in England and in America. With the increased popularity of white-feathered fowls, this variety of Orpington was taken up by fanciers, who have developed the fowls into Orpington type, with white beaks and plumage and white or pinkish-white shanks and toes. To the English fanciers belongs the credit of the greatest development in size and breed characters. The main improvement in plumage color has been made in America.

41. History.—The original Single-Comb White Orpington was produced soon after the Black Orpington came into public favor. Those first seen, especially the males, had the Langshan shape of back and tail. The more recent types show evidence of having been crossed with White Dorking and White Cochin fowls. When first shown in America, the White Orpington was not well received. Following the advent of some of perfect Orpington type, however, the White Orpington became equally popular with other white-feathered fowls. The Rose-Comb White Orpington has not received more than passing attention.

42. Description.—The White Orpington must conform in every way to the shape description given for the Black Orpington. The fowls of this variety should, if possible, be even more true to breed characters than the Black Orpingtons. Some fowls of the white variety are of almost perfect Orpington type, and some have plumage that is white to the skin. They are more generally found, however, with considerable creaminess or straw color in their plumage. Females are freer from this defect than the males. The color of the skin and the shanks is more nearly perfect in this variety than in other varieties. In size and weight, the White Orpington is only slightly inferior to the Black Orpington.

43. Mating.—In selecting White Orpington fowls for mating, attention must be given to both shape and color. In a general way, both have been lacking, and there has been a surplus of poor quality. Only White Orpington females having pronounced excellence in size, shape, and color should

be used as breeders. Fowls that have white skin and shanks can have the purest white plumage, including quills, and this can be maintained without injury to the color of the skin and shanks. For this reason, there should be no difficulty in establishing pure plumage color in White Orpingtons. There is, however, more difficulty in having white plumage in the males than in the females. Breeders must be, for a time, at least, content with the best males they can get and, by breeding them with white females, establish a strain that will produce White Orpingtons of proper size and shape, with at least a near approach to pure white plumage. There is good evidence that Buff Orpington blood has been intermingled with the White Orpington blood. Though this has not changed the color of the skin and shanks, it has stained the plumage of the White Orpington, and hence the breeder must devote more time and care to the elimination of this yellow tint than would be needed if only the creamy-white tint were present.

Small single combs that conform in shape to a perfect White Plymouth Rock comb should be preferred in both male and female White Orpington breeders. To safeguard this, all fowls with bad combs should be rejected as unfit for breeding purposes. This same rule should apply to breeding fowls of the Rose-Comb White Orpington variety, and the type of rose comb that belongs to the White Dorking or the Wyandotte family should be preferred to that of the Hamburg. White in the ear lobes must be avoided. This defect has been acquired naturally from the Leghorn family, and a parent having it is apt to transmit it to the offspring for many generations. Enamel white in ear lobes of any breed or variety that should have red ear lobes is a serious defect.

To breed White Orpington fowls fit for exhibition, it is necessary not only to scrutinize carefully all fowls used in the breeding pen, but also thoroughly to investigate their blood lines. A careful examination of the under plumage of breeders should be made. Smut in the color may have come from a cross with the Black Orpington, and though in some instances it may clear the plumage, it may also prove to be detrimental if too freely infused into a flock.

JUBILEE ORPINGTON

44. Origin.—The **Jubilee Orpington** originated from among the offspring that resulted when the crosses were made for the production of the other Orpington varieties. Many of these offspring were of a great variety of colors.

45. Development.—The Jubilee Orpington fowls were developed from the fowls produced as just mentioned that had plumage color resembling that of the Spangled Old-English Game. Though no color standard was adopted for them, they were developed into a separate variety having the Orpington shape, and of beautiful plumage color and markings. Both single-comb and rose-comb varieties of these fowls have been developed.

46. History.—The history of the Jubilee Orpingtons is identical with that of the other varieties. Statements relative to their origin, however, have been disputed, some authorities insisting that they have come from intermingling Sussex and Spangled Dorking fowls. From those brought to America, fowls of more than average quality have been bred, but the variety has not been admitted to the American Standard.

47. Description.—Jubilee Orpington fowls of both the rose-comb and the single-comb variety must conform to the breed characters of the Orpington family. The color of their plumage is almost identical with the color of the Spangled Old-English Game. The general color of breast and body is reddish brown, marked with white and black. In the males, the ground color is a bright mahogany; hackle and back are mahogany color, each feather having a black center stripe, a mahogany-colored shaft, and a white tip; the rest of the body plumage is of the same shade, having black spangles and white tips. The wing bows should match the hackle, and there should be a bar of black across the wings; the primaries and secondaries are mahogany, black, and white, the primaries showing the most white; the sickles are white, black, black and

white, or black, white, and mahogany; the coverts are colored like the sickles, but usually have more white. The three colors should be distinct and well defined and so assembled as to form an attractive color combination.

The females should match the males in color; the color of the entire body and back plumage should be similar to the breast color of the males; the primaries, secondaries, and tail feathers should match the same parts in the males.

48. Mating.—It is impossible to give rules for mating Jubilee Orpington fowls that can be practiced with any certainty of success. The best Jubilee Orpington fowls that have been produced have come from mating males of perfect shape, rich, brilliant color, and the least quantity of white in any part of the body plumage with females of equal quality, perfect or nearly perfect in color, and having more or less white in the wings and the tail. From such matings good offspring may be produced.

SPANGLED ORPINGTON

49. Origin and History.—The numerous kinds of plumage color that have come from the crosses made to produce Orpington fowls have made many varieties. The Jubilee and Spangled Orpingtons are instances of this. **Spangled Orpington** fowls of both the rose-comb and the single-comb variety have been shown as non-standard varieties. They have ranged in color from black and white, like the Mottled Java, to reddish brown and white, like the Jubilee Orpington, except that they were mottled with white. "Broken-Colored Orpington" would be a more appropriate name for many of them, for it is possible to find from five to seven colors in the offspring from promiscuous matings. They do not breed so true in color as the Ancona or the Houdan fowls, but they have an attractive variety color.

Speckled Dorking, Speckled, or broken-colored, Sussex, and Mottled Java fowls are all like the Spangled Orpington, and undoubtedly all have come from the intermingling of fowls with white and dark plumage.

50. Description.—The latest English Club Standards describes the Spangled Orpington as having beak, legs, and feet black and white, or black mottled with white; toe nails and skin, white; eyes, red or brown; comb, face, wattles, and ear lobes, red. The plumage of the males is black and white; the hackle is black, with white tips; the back is slightly ticked with white; the thighs and fluff have white spangles; the breast is black with white spangles, the color showing in equal proportions; the tail is black and white; the sickles and coverts are black, tipped with white.

The plumage of the female should conform to the breast color of the male. In both, the black should be glossed with a green sheen, and the white should be true and pure.

51. Mating.—Like the Speckled Dorking, Speckled, or broken-colored, Sussex, and Mottled Java fowls, none of the Spangled Orpington fowls can be depended on to reproduce their own color in many of their offspring, or to breed a quality or type of plumage color equal to that of the Spangled Hamburg. There are no rules for mating that can be depended on to produce offspring of regular color and markings. Spangled Orpington fowls should be bred for shape the same as the fowls of the other Orpington varieties.

RECENT VARIETIES OF ORPINGTON

BLUE ORPINGTON AND CUCKOO ORPINGTON

52. Recently there were originated in England two new varieties—the *Blue Orpington* and the *Cuckoo Orpington*. As both varieties were originated together, they will be treated under one heading.

The beginning of both the **Blue Orpington** and the **Cuckoo Orpington** was in a crossing of Black Orpington males with White Orpington females. The greater part of the offspring of this cross were white fowls and black fowls. The white offspring had blue-black shanks and feet and eyes of a dark

color; the black offspring had mottled shanks and feet and red or brown eyes; a very few of the cockerels were partly cuckoo marked (barred); and a few of the pullets were black, faintly tipped on the saddle and breast with cuckoo markings.

The cuckoo-marked cockerels of this cross were mated with Spangled Orpington pullets, and the cuckoo-marked pullets were mated with Spangled Orpington cockerels. One-half of the offspring of these matings were Cuckoo Orpingtons, one-fourth were Spangled Orpingtons, and of the other one-fourth some were black, some were white, several were blue cockerels, and a few were blue pullets.

FIG. 1

One of these blue cockerels was mated with some of the cross-bred white pullets, one to some of the cross-bred black pullets, and one of the cross-bred black cockerels was mated with the blue pullets. About two-thirds of the offspring of these matings were blue.

The Cuckoo Orpington was developed by selecting and mating the best of the cuckoo-marked offspring of the first cross, and this selection and mating was continued until Cuckoo Orpingtons like those shown in Fig. 1 have been produced.

53. Description of Blue Orpington.—In both the male and the female the color of beak should be blue; eyes, black or brown, black preferred; comb, face, wattles, and ear lobes, a bright red; legs, blue; toe nails, light or white. The plumage color of the male should be in neck, hackle, saddle, wing bows, back, and tail, a dark slaty blue; the rest of the plumage should be of a medium slaty blue; each feather is laced with a darker shade of blue. The plumage color of the female should be a medium slaty blue throughout, laced with a darker shade except on the head and neck, where both the body color and the lacing is of a darker shade; the color and markings of the body plumage of the female must match the color and markings of the breast plumage of the male. The size, shape, and breed characters are the same as in all Orpingtons.

54. Description of Cuckoo Orpington.—In Cuckoo Orpingtons, the beak should be white; eyes, red; comb, face, wattles, and ear lobes, red, no white being permissible either in face or lobes; shanks and feet, white or white mottled with black, white being preferred; toe nails very light or white. The plumage color of both the male and the female should be a light bluish-gray ground color, each feather being barred across with a darker blue black, proportionate to the size of the feather, and the same on all parts of the body. The closer the color and markings come to the color and markings of the Barred Plymouth Rock, the more perfect will they be considered. The size, shape, and breed characters are the same as in other Orpingtons.

COLUMBIAN ORPINGTON

55. Another new variety of Orpington has been originated in America. The fowls of this variety were first produced in Maine and Massachusetts and were named *Ermine Orpington*. Their plumage so closely resembles that of the Columbian Plymouth Rocks that, when they are admitted to the Standard, they are likely to be called **Columbian Orpington.**

56. Origin.—The Columbian Orpington fowls were originated by Angier L. Goodwin and were bred from Orpington

sports of the color of the Light Brahma. Whether these sports came from the Black Orpingtons or from a cross of Black and White Orpingtons cannot be stated. These sports were mated with White Orpington hens and the offspring were selected, mated, remated, and bred for the improvement of color. As this variety has descended from Orpington fowls, a better type has been developed than would have been the case had Brahma or Columbian Plymouth Rock fowls been bred into them.

57. Development.—The development of the Columbian Orpington has scarcely begun, but continual care in breeding will undoubtedly make the fowls what they should be.

58. History.—The sports that came from the other varieties of Orpingtons cannot be traced to any certain matings. When a sport of the Light Brahma color made its appearance, it was mated to the best advantage and the offspring selected with care. The variety was named Ermine, after the little animal of that name. This variety was first shown in Boston during the winter of 1909.

59. Description.—The Columbian Orpington fowls should be of Orpington shape and have the same plumage color as defined in the American Standard for the Columbian Wyandotte and the Columbian Plymouth Rock, with the exception that the beak, shanks, and toes should be white or pinkish white, and the skin should be white.

60. Mating.—The only rule that can be laid down for mating Columbian Orpington fowls is to select those of the best Orpington shape and of the plumage color of the Columbian Plymouth Rock. The best of the offspring should be selected, mated, and remated, and in doing this the fancier should always bear in mind what the proper breed characters and plumage colors are.

SCOTCH GRAY

61. There are a few fowls peculiar to Scotland. The two best known are the Scotch Gray and the Scotch Dumpy. The **Scotch Gray** is much like the Barred Plymouth Rock, and the Scotch Dumpy closely resembles the Creeper. These fowls have never been bred to any extent for exhibition, though in recent years the Scotch Gray has been so improved as to bring it into public notice as an exhibition fowl.

62. Origin.—The Scotch Gray fowls originated in Scotland, but so little is known of them that it is impossible to make authentic statements regarding their origin. Undoubtedly they have resulted from intermingling fowls of dark and of light plumage.

63. Development.—The development of the Scotch Gray fowls has been more a matter of chance than of selected matings. Prior to the formation of the Scotch Gray Club in England, there was but little interest in uniformity of size and color, but since the formation of the club, a standard for them has been compiled.

64. History.—In regard to the history of the Scotch Gray the secretary of the Scotch Gray Club states: "The Scotch Gray, or 'Chick Marley,' as Scotch country people used to call it, is one of our good, all-round breeds of poultry. They are good layers of fairly large eggs of a pale cream color. They are not good broody hens, often sitting only 10 or 12 days and then deserting the nest. At a meeting of the Scotch Gray Club some years ago it was agreed, after some discussion, to class them as non-sitters. They are excellent table fowls, being finely covered with flesh of a very close texture and fine flavor, and pale cream in color. They are also very prolific fowls, and when crossed with any breed, the offspring will show distinctive traces in size, shape, and color of the Scotch Gray parent."

65. Description.—The Scotch Gray fowls are described by the Scotch Gray Club Standard as fowls of neat appearance, more like the Andalusian in formation than the general-purpose fowls. They have single combs. The males weigh from 9 to 11 pounds, and the females from 7 to 9 pounds. Both sexes have beaks white, or white striped with black; the eyes, face, comb, wattles, and ear lobes are bright red; and the shanks are white or white mottled with black. The ground color of the males should be a pale, grayish blue, finely and evenly barred with a dark metallic blue; the alternating bands of the barring should be equal in width and proportioned to the size of the feather. The color should be the same in all parts of the body; the markings should be small, even, and sharply defined. The female should be of the same color as the male, with larger and more distinct markings. Illustrations of these fowls show them colored like the Barred Plymouth Rock, the end of each feather having a marking of dark that conforms to the shape of the feather.

66. Mating.—In mating Scotch Gray fowls for color, the same rules must be followed as when mating Barred Plymouth Rock fowls. Scotch fanciers say that when mating fowls of this breed for producing the best form and color, males of perfect shape should be selected; they should be of medium size and evenly marked. They should be mated with hens or pullets of equal quality and of good color. Never breed from a male or female that has considerable white in the wing or tail. The only way to succeed with them is to have them line bred, with blood lines equal to the best Barred Plymouth Rock.

SCOTCH DUMPY

67. Origin.—The origin of the **Scotch Dumpy** is unknown. Mention of these fowls was made in Scotland and America about 1850. They were then known by many names, none of which gives any intimation of their origin.

68. History.—Fowls of the character of the Scotch Dumpy were mentioned by Rae in 1678. They have been known as *Bakies*, *Jumpers*, and originally, in England, as *Grigs*. They have not been developed or bred to any extent even for utility purposes. Harrison Weir states that the hens were good sitters and mothers, and, when very young, the chicks were tender to rear. As a breed they were particulary active, being fond of perching on trees and flying about. As table fowls they were said to be excellent, and their quaint appearance made them attractive as household pets.

69. Description.—The Scotch Dumpy fowls are of fairly good size, with single combs, red ear lobes, and heavy body formation. Their heavy body formation is more marked from the fact that their shanks do not exceed $1\frac{1}{2}$ or 2 inches in length, and are thus out of proportion to the size of the body. Some of the males weigh as much as 8 pounds; females weigh from 5 to 6 pounds. They are said to be better table meat than the Dorkings, and are highly esteemed in their native heath for hatching and brooding chicks. The English Club Standards states that the shanks of these fowls shall be not over $1\frac{1}{2}$ inches long; that their general body formation shall be heavy, and that they shall move about with a waddling gait like a duck. As the Scotch Dumpy Standard puts it, "the extreme shortness of leg gives them the appearance of swimming on dry land." The beak and shanks must match in color; the eyes, face, comb, wattles, and ear lobes must be red; the plumage may be of any color, silvery gray, Dark Dorking, cuckoo, or black being preferred. The shanks should be white, except in the

black variety, which must have shanks of black, slate, or cuckoo color, which may be mottled. Shortness of leg must not be considered as of most importance. The fowls must be large, low set on the legs, and very heavy in body. They must possess at least a moderate qualification in plumage color, that is, the plumage color must be good of its kind.

70. Mating.—There is no set rule for mating Scotch Dumpy fowls beyond the fact that in the breeding fowls size and shape must accord perfectly to Standard demands, and the variety color preferred must be of equal quality to that of the same variety color in other breeds.

SUSSEX

ORIGIN AND HISTORY

71. Origin.—In the early days of poultry growing in England, Sussex was the locality that produced the best table poultry. Fowls grown in that locality became known as **Sussex** fowls. In speaking of them, Harrison Weir groups them as Kent, Sussex, Surrey, and Dorking fowls, and from his illustrations of them, a person might be led to believe that many kinds of fowls were raised in that locality at that time; some were short in their legs and others had longer legs, but all had the body formation best suited for table poultry. A poultry expert of Sussex stated that during a period of 10 years he had fattened a large number of these fowls and shown them as dressed poultry; that he had been very successful with them, and had won many prizes. A pair of his Light Sussex cockerels won first prize and the medal as the best in the show room. He makes a point of the fact that they were barely 18 weeks old, and when killed and plucked, the pair weighed a little more than 20 pounds, and that these were not the heaviest fowls of the kind that he had produced. He states that they had not been fostered or caponized, but were ordinary chickens picked up from the farms and put through a fatten-

ing process for 3 weeks. This is the character of fowl mentioned by Moubray in early days, from which the greater part of all white-skinned poultry bred in England have a part or all of their origin.

To fanciers, until recently, Sussex fowls existed in a state of dormancy. In July, 1903, the Sussex Poultry Club was formed and three varieties of the breed were recognized, namely, Light, Red, and Speckled; in 1904 these varieties were shown in London at the Show of the Royal Agricultural Society of England. The fowls shown were not of the best; they were irregular in form and color, and showed the influence of the injudicious intermingling of many colors. Since that time, a standard has been made for them and they have become fairly popular in England as exhibition fowls.

72. History.—Edward Brown, F. L. S., of England, states that the foundation of the Sussex fowls, like that of the Dorking, is difficult to trace, and the conclusion, namely, that all were originally the same, can scarcely be avoided. In numerous publications that have mentioned poultry keeping during a period of almost 200 years, reference is made to breeds and varieties that correspond closely to the description of the fowls bred in and about Sussex, England. From them, the Dorking, the Orpington, and the modern type of Sussex fowls have been developed.

An early writer states that among the many varieties of Dorking fowls might be found some in which the fifth toe was lacking, and that these were known as Sussex, or Surrey, fowls. Another says that the old Sussex or Kent fowls were closely allied to the Dorkings. Harrison Weir remarks that the Surrey, or Sussex, fowls were generally of a gray color, often sandy brown, or brown like a Black-Breasted Red Game hen. It was the general opinion that the best Sussex fowls were those having color similar to that of the Gray Dorking. The fowls having the brown or brownish color, like the Black-Breasted Red Game hen, were called the Red Dorking or Red Sussex, according as they had five or four toes. This shows how closely they all resembled one another.

The originals of the present Sussex fowls were plentifully grown in and about Surrey and Kent, England. Their distinguishing features were white skin and shanks and perfect form for table poultry. The Dark, the Silver-Gray, and the Speckled Dorking fowls were selected from them, each having the distinguishing mark of five toes. The varieties of Sussex fowls, as now recognized, were plentiful at that time; yet not then so well separated and bred for variety color as now. A club was formed in their interest in 1903, and since that time the Light, the Red, or Brown, and the Speckled Sussex fowls have been bred to form and color.

LIGHT SUSSEX

73. Development.—The **Light Sussex** fowls have been developed by selecting the best of their kind from the large number grown in the Sussex districts. These fowls have the same general appearance as the Columbian Plymouth Rock, and they have been bred according to the rules for producing color in Light Brahmas.

74. Description.—The Light Sussex have the same breed characters as the average grade of Dorking fowls. They are more upright in form, as well as more active than the Dorking. The body formation is more extended than that of the Plymouth Rock, and they have single combs. The face, comb, wattles, eyes, and ear lobes are red; the skin and shanks are white. They average from 1 to 2 pounds heavier than the Plymouth Rock fowls.

75. Mating.—In mating Light Sussex and all other varieties of Sussex fowls, marked attention must be given to the selection of breeding fowls of the size and shape to conform to their description. To establish and improve color, the same methods of mating must be adopted as have been suggested for mating Light Brahma or Columbian Plymouth Rock fowls for plumage color. Care must be given to the preservation of the proper color of the shanks and skin in all varieties.

RED SUSSEX

76. Development.—The **Red Sussex** fowls are frequently called *Brown Sussex*. They have been developed by selecting the Red Dorking, or Sussex, fowls that had but four toes and breeding them to establish proper breed formation and variety color.

77. Description.—The Red Sussex are fowls of large size, and have a body formation somewhat like that of the largest Andalusian, with the exception that the neck and legs of both the male and the female are shorter in the Red Sussex than in the Andalusian. The English description says that they are very deep bodied, but are not so dense as the Dorkings. This is more specially noticeable in the hens. It is claimed that they average less bone and offal, or waste, than the Dorkings, and that, though the breastbone is long and carried well forwards, there is less inclination to lean forwards or downwards among the Sussex than the Dorkings. The comb and head should be of medium size; the eyes, face, comb, wattles, and ear lobes should be bright red; and the shanks, feet, toes, and skin should be white and fine in texture. The plumage of the males must be dark chestnut brown, with a greater depth of color on the saddle and wing bows; the neck hackle must be rich brown, striped with black; the wings, dark brown, with black flights; the main tail feathers, black; the tail coverts, a dark or reddish brown. In the females, the neck hackle should be dark brown, striped with black. The body color throughout should be brown; the main tail feathers and flights, dark brown or black. Preference is given to fowls of this variety that have nearly the same plumage color as Rhode Island Red fowls.

78. Mating.—In mating Red Sussex fowls it is important to select the breeders with a view to sustaining the proper breed characters in the offspring. In mating for color, if a preference exists for the color and markings of the Rhode Island Red, select the fowls for the same color as is required for Rhode Island Red fowls. If there is a demand for the color

and markings of either the Black or the Brown-Red Old-English Game fowls, select and mate fowls that may be expected to produce such colors. The best results are obtained by adhering to the reddish-brown color throughout, marked with black on the neck of both male and female, and on the wing bars and saddle feathers of the male.

SPECKLED SUSSEX

79. In the description of Orpington fowls, the fact is mentioned that both the Jubilee and the Spangled Orpington were closely related to the Sussex fowls. The **Speckled Sussex** fowls have the same general appearance and breed characters as the Jubilee and Spangled Orpingtons. There is so little difference in them as ordinarily bred that it is almost impossible to separate them. The tendency has been for tight feathering in the Sussex fowls and loose feathering in the Orpington fowls for such a length of time that these fowls are now separated more because of this distinction than because of any difference in the normal shape, color, and markings. In the breeding of the Speckled Sussex, the breeders must be selected for shape and color so as to produce fowls true to Sussex breed characters and of the chosen variety color.

FRENCH, POLISH, AND MISCELLANEOUS FOWLS

FRENCH

REMARKS

1. The French breeds that will be considered in this Section are the *Crevecœur*, the *Houdan*, and the *La Flèche*, which are recognized by the American Standard, and the *La Bresse*, or Bresse as called in America, the *Bourbourg*, or Bourborey, and the *Faverolle*, which are not recognized by the American Standard. There are other French breeds, but they are little known outside of their own country.

Edward Brown, of England, states that there were more breeds and varieties of fowls in France than in any other country with which he was familiar. The main object in France having been to conserve and improve the fecundity and the table properties, the fixity of external character was adopted, because it was found that by so doing the perpetuation of such properties were secured. There is a considerable difference in the class of fowls kept in the various districts of France, but in each district the fowls are remarkably uniform.

It is impossible to cite a common origin for French fowls. The French people were the first to give marked attention to the production of poultry. The people of no country have ever given so much attention to poultry for utility purposes as those of France. Less attention, perhaps, has been given in France than elsewhere to the cultivation of fowls for exhibition. The fowls of Belgium have been the only rivals of those of France for egg production and market qualities.

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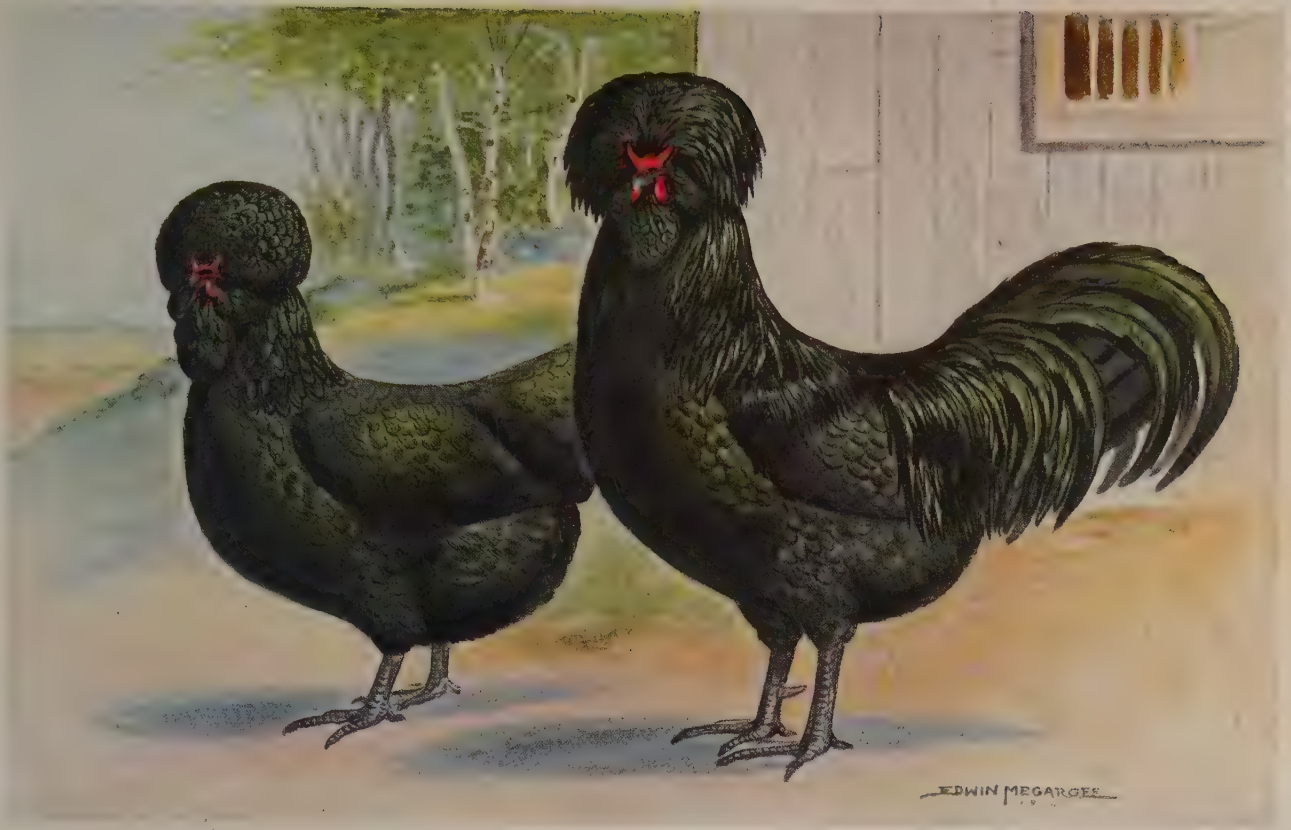
CREVECŒUR

2. Origin.—Judging from the statements made by W. B. Tegetmeier, of England, the **Crevecœur** is the oldest of the standard-bred fowls of France. He states that some idea of their value may be gained from the fact that at the first great agricultural exhibit held in Paris in 1855, two equal sets of prizes were offered for poultry, the first for Crevecœur fowls, and the second for all other kinds taken together. The Crevecœur, as seen in America, and as described in the American Standard, has been remodeled by the English from the original French type into a fowl that is extremely fanciful.

It is freely admitted that the Crevecœur breed originated in the locality in France from which it takes its name, and that it was produced by crossing Polish with fowls of one of the varieties peculiar to France. In early days, special mention was made of the fact that the Crevecœur fowls laid large eggs with white shells. This stamps their ancestors as one of the Italian varieties, and it is reasonable to suppose that they came from crosses made with the Polish and the Italian fowls, from which originated the active fowl written of by Mr. Vivian in 1853, and these were adopted by the fanciers of England, who, by mating, selecting, and remating, have created the present type of Crevecœur.

3. Development.—In France, the Crevecœur fowls were developed for egg production and market. Lemoine, a French writer, says that they are easily fattened, and that in all districts where they are extensively bred they are selected and fattened into the finest table poultry. English poultrymen have developed them into the present type of fowl, having greater proportions than formerly.

4. History.—The Crevecœur fowls were first referred to as Black Polish, or black fowls having black crests and beards; later, they were named after the village in which they originated. They were formerly bred with black, with white, and with blue plumage, and were much smaller than at present. Later, the English fanciers made them into large fowls,



Crevecoeurs

with large crests and beards, and black plumage throughout. At the present time, they are but sparingly bred outside of France.

5. Description.—A marked peculiarity of the Crevecœur, as well as of other French varieties, is their antler, or V-shaped, combs. In shape, the Crevecœur resembles the Cochin more than a fowl of the American or Polish breeds. The fowls are described as large, broad in the back, full and round in the breast, and having both length and breadth between the thighs. The fluff is rather short in comparison with that of members of the Cochin family. They are short in the legs and compactly built, have large oval crests and full beards, which hide the entire head except the comb, beak, and wattles. Their plumage is a rich, glossy black; their shanks and feet are very dark; their eyes are bright red. The skin of the Crevecœur, like that of fowls of all early French varieties, is white. The Standard weights for this breed are: Cocks, 8 pounds; cockerels and hens, 7 pounds; pullets, 6 pounds.

6. Mating.—The value of the exhibition qualities of the Crevecœur depends so much on the size and shape of the crest and beard as to make these features of great importance. In selecting fowls from which to breed offspring for exhibition, special attention must be given to perfect formation of the body, crest, beard, and comb. Other considerations are size, and black plumage that glistens with a rich, brilliant sheen. To obtain all these, the breeding stock must be of almost perfect quality.

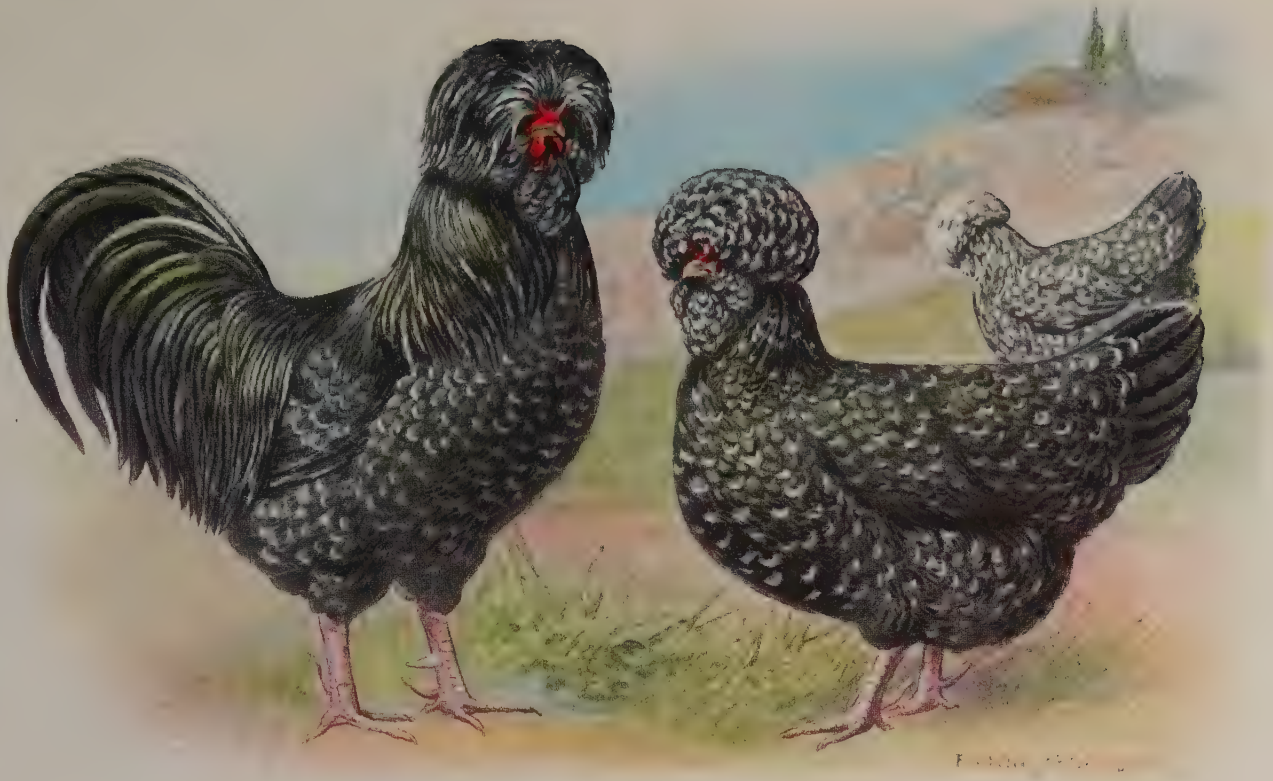
Crevecœur fowls were originally of uncertain plumage color, and even at the present time both red and white feathers are apt to show in the offspring This necessitates care in selecting the parent stock from fowls that are perfect in all requirements of the breed and that have been line bred from a strain that is known to produce offspring of superior quality.

HOUDAN

7. Origin.—The **Houdan** fowls were originated in France and named after the locality in which they have been bred for more than a century. Early poultry authorities say that the Houdan was the Dorking of France The fowls have five toes and speckled or mottled plumage, and recall the old-fashioned Colored Dorking that existed before an attempt had been made to breed them into fashionable form or color. Undoubtedly they resulted from the union of Polish, or early five-toed Roman fowls, and one of the many kinds bred in France at the time of their origin. Edward Brown has stated that they originated from intermingling Black Polish, Crevecœur, and the common five-toed fowls. From what source the leaf comb emanated is unknown.

8. Development.—The Houdan fowls have been developed from the early, sparingly built fowls with small crest, speckled plumage, and the uncertain character of five toes into fowls of larger size, regular formation, broken-colored plumage with regular markings, beautiful crests, beards, and combs, with the peculiarity of five toes so strongly established as to reproduce almost to a certainty. In their development, the French have clung to market qualities. The English fanciers have changed the Houdan in so many ways as to make it almost a distinctive breed as compared with the Houdan of France, and the American fanciers have so changed the breed as to make the fowls quite unlike either of the other types.

9. History.—The Houdan fowls were distributed through many parts of France more than a century ago. The first record of their introduction into England was in 1850. Shortly after their appearance in England, they were accepted as a fancier's fowl and were bred largely for exhibition. From England they were brought to America in early days. The Houdan, the Crevecœur, and the La Flèche are mentioned in the Standard of 1867, and the comb of the Houdan is described as a leaf comb.



Houdans

The type of Houdan bred in England and in America at that time was alike, including the comb, until a change was made in the Standard of 1883, which declared for the horn comb, shaped like the letter V. Daniel Pinckney, of Onondaga, New York, claimed that the antler, or **V**-shaped, comb made its appearance naturally in his flock of Houdan fowls. Others claim that Crevecœur were bred with Houdan fowls to darken their plumage, and from the introduction of this breed the antler comb made its appearance. Since 1883, the antler comb has been accepted for Houdans.

10. Description.—The English Standard describes the Houdan as more like the Dorking than any other breed. The American Standard is not so pronounced in its description, yet the statement is made that the Houdan resembles the Dorking in shape and size, and that the crest is one of the most important features. The greatest difference between the English and the American Standard is in the description of comb and plumage color. The English Standard says that the comb shall be a well-defined leaf comb, somewhat resembling a butterfly, placed in the center of the head against the crest. It must be neat and of medium size. The American Standard says that the comb shall be **V** shaped.

In color, the English Standard calls for red eyes, bright-red comb, face, and wattles, white or pinkish-white ear lobes, and black-and-white plumage, evenly mottled; the breast may be lighter than the body plumage. In young fowls, black predominates, but the mottling must be even and true. The legs and feet should be pinkish white, the white mottled with blue or black.

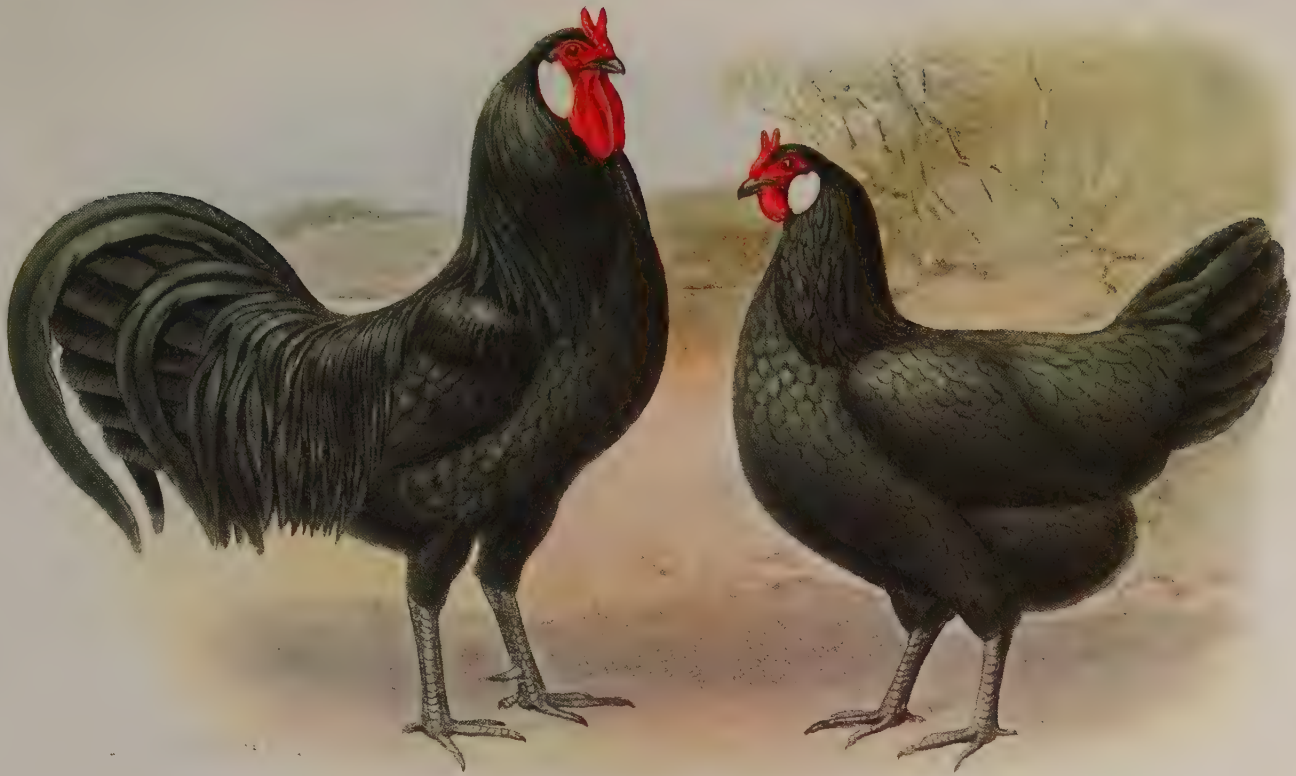
The American Standard describes the Houdan as having white ear lobes, a bright-red comb, face, and wattles; reddish-bay eyes; and black plumage mottled with white, with less white than is demanded in the English Standard. The shanks and toes must be of the same color as required in the English Standard.

The crest and head points are of importance. The crest must be large and globular, and as nearly perfect in color as

possible. Splits or divisions of any kind in the crest will almost exclude them from the show room. In addition to this, they must have a well-defined beard growing beneath the beak and about the throat, have a V-shaped comb, and be in perfect condition. All of these points are difficult to obtain in a fowl that conforms to the Houdan type and has generous size and proper plumage color.

In the color illustration a pair of Houdan fowls is shown that conform to the American type. These are portraits of the best that were shown in America during the winter of 1910–11. The female in the background is an English prize winner. It will be seen from this illustration that black predominates in the American type and that more white in the plumage is preferred in England. The weights of Houdan fowls are: Cocks, $7\frac{1}{2}$ pounds; cockerels and hens, $6\frac{1}{2}$ pounds; pullets, $5\frac{1}{2}$ pounds. It is not unusual, however, for Houdans to exceed these weights.

11. Mating.—The chief difficulty in breeding Houdan fowls to conform to the American Standard is the inclination to produce offspring much too light in plumage and small in size. This breed has been so persistently inbred to produce head points and plumage color that conforms to Standard description that its size has been reduced and the vitality lessened. To overcome this, mature hens of large size must be used in the mating, and equal care must be given to the selection for large, well-formed crests and satisfactory plumage color. Pullets that are too dark for exhibition are apt to show sufficient white after their first molt. All females and a number of males acquire more white each time they molt. In all matings, males that are too dark for exhibition will be safer to use than those that have light plumage. Small females of improper formation are of no value in the breeding pen. Exhibition Houdan fowls can be produced only from stock that has been carefully bred for the establishing of a strain that will reproduce better than themselves. The Houdan is one of the most difficult breeds to produce in perfection; it is almost impossible to breed fowls of good quality from any but the best.



La Fléche

LA FLÈCHE

12. Origin.—So little is known of the origin of **La Flèche** fowls that it is impossible to tell of them with any certainty. What is known can be told better in their history.

13. Development.—But little is known of the early development of the La Flèche fowls. Since about 1850, they have been bred in England to Standard requirements. But few have been bred in America. Aside from the development that would naturally follow market requirements, but little change has been made in them for many years, except to improve their beauty for exhibition.

14. History.—French writers state that the La Flèche has been known as a separate breed for more than 500 years, and it is thought that it has existed for even a longer time. Modern writers credit its origin to the crosses of black Spanish and Polish fowls that were bred in the La Flèche district of France. They had **V**-shaped combs and stately carriage, and for a time had small crests and the peculiar skull formation of the Polish. La Flèche fowls were brought to England at about the same time as the Houdans, and were bred to Standard requirements. Those that were first brought to America had small crests, and but little has been done for their improvement since that time.

15. Description.—In writing of the La Flèche fowls, Lewis Wright states that in general appearance they were more like the Spanish of that time than they were like any other fowl. Although they were not as tall as the Spanish, they were larger, often weighing from 8 to 10 pounds. The La Flèche fowls of the present have the carriage of the Minorca, and are larger in body but not as long as the Minorca. The American Standard requires the hen to have less weight than the Minorca, but the fowls are frequently bred to a weight 3 or 4 pounds heavier than the Standard requires. The peculiarity of fowls of this breed is their **V**-shaped comb, white ear lobes, stately carriage, large size, black shanks, white skin, and rich,

glossy black plumage. They lay large white-shelled eggs. The American Standard describes them as fowls of medium size, having long, powerful shanks, and full, prominent breasts. The standard weights are: Cocks, 8½ pounds; cockerels and hens, 7½ pounds; pullets, 6½ pounds. Although the La Flèche fowls are of attractive appearance, they have never been popular in America.

16. Mating.—So little is known of the La Flèche breed and so little has been done in respect to exhibition qualities as to make it almost impossible to describe the fowls best suited for matings. All that can be done is to select some of the best fowls that can be secured in England, mate and remate their offspring, and select the best to conform to size, shape, and color of the breed. The difficulties are the tendencies to colds, to which these fowls are subject when exposed to dampness. In localities where the weather is changeable, trouble is experienced in growing crested fowls, and the La Flèche fowls seem to be troubled in the same way.

LA BRESSE

17. France has paid more attention than any other country to the improvement of fowls for egg production and table poultry. In referring to this, in his Book of Poultry, Lewis Wright, of England, wrote: "Among the varieties of French fowls, the **La Bresse** fowls occupy the premier position in respect to table quality, if the prices obtained for the best fowls may be taken as evidence. The district where these fowls are bred comprises part of the department of Ain and Seine-et-Oise that is to the south of the old province of Burgundy, and in that district the poultry industry is a very important branch of agriculture."

18. Origin.—When and how the La Bresse originated has never been determined, but the fowls are undoubtedly of Italian origin. French writers differ on this subject, some claiming that they have come from the intermingling of Andalusian and French fowls; others believe that they were

the natural result of an interchange of fowls from Italy with France. As they now exist in Southern France, they resemble the Leghorn fowls.

19. Development.—The development of the La Bresse breed has been only such as would follow careful breeding to improve the fowls as egg producers and for market.

20. History.—As mentioned, much of the poultry of France is named for the locality from which it comes. The southern districts of France have been noted for more than 100 years for the production of poulards, capons, and market poultry of remarkable quality known by the name of La Bresse. Although this breed has existed in that locality for a long time, the fowls have been but little distributed in other parts of the world.

21. Description.—The La Bresse are bred in numerous varieties—the Black, the Blue, the Gray, and the White Bresse being the only varieties that are mentioned as being separate. They are fowls of medium size, in form like the utility Leghorn, but more prominent in breast and body. They weigh from $4\frac{1}{2}$ to 7 pounds, according to their age and sex. The color of the skin and flesh is the beautiful pinkish white so much admired in France. The shanks and feet are of a bluish tint; the eggs have bluish-white shells. They have single combs, and white ear lobes that are frequently mixed with red.

The Gray Bresse is mentioned as the original variety. There seems to be no proof of this, but such is the accepted theory. In this variety, the color is mostly white, with dark or gray markings; the ear lobes are white. The pure white variety is thought to have been bred by selecting the whitest fowls of the gray variety. The black and the blue varieties seem to be bred more for egg production, and the white and the gray varieties for market poultry.

22. Mating.—No attention has been bestowed on breeding La Bresse fowls for exhibition purposes. The only rule of mating that has been followed has been to select the best of

an accepted type that produced offspring that laid well and matured into the most desirable market poultry. In France, this would be a fowl having length, breadth, and depth of body, with an abundance of breast meat. This would necessitate width between the thighs and breadth of back. Such fowls can be readily fattened, and will fill out well in the back—a feature highly considered in France.

BOURBOURG, OR BOURBOREY

23. Origin.—The **Bourbourg,** or Bourborey, breed of fowls has evidently been made by crossing Light Brahma fowls with fowls of other breeds, with the object of producing a better fowl for market. The claim has been made that the Bourbourg fowls are part Malines. Both the Malines and the Bourbourg fowls show the influence of Asiatic blood.

24. Development.—The Bourbourg fowls were originated and developed for the purpose of having a fowl of desirable proportions for market. As they are used to a considerable extent for capons, a round, plump body formation, with the greatest length of keel, or breastbone, has been sought.

25. History.—The Bourbourg fowls are natives of that part of France lying near the border of Belgium. The Belgian fanciers have become so proficient in the growing of poultry as to have sorely pressed the people of France for supremacy. Naturally, under such conditions, and where so much attention is given to the production of market poultry as is devoted to this line of agriculture in both Belgium and France, every effort would be made to excel; the result of this has been a great improvement of all the poultry of those countries.

26. Description.—The Bourbourg fowls resemble the Columbian Plymouth Rocks in many ways—in size, or weight, they are about the same, also in plumage color. The color of their skin is white, and their shanks and feet are pinkish white and sparingly feathered. The shells of their eggs are tinted.

Salmon Faverolles

27. Mating.—The Bourbourg fowls have never been bred for exhibition. For this reason, plumage color is not well defined. In mating for the purposes intended, perfect body formation is the one requirement for success. If bred for exhibition, type must be well defined in the fowls used, and the same methods should be applied as are necessary for producing plumage color in Light Brahma fowls.

FAVEROLLE

ORIGIN, DEVELOPMENT, HISTORY, DESCRIPTION, AND MATING

28. Origin.—The **Faverolle** fowls originated in the northern part of France, and in the neighborhood of the place called Faverolle. They are said to have been created to improve or increase the egg production in that locality. Brahma, Cochin, Dorking, Hamburg, and perhaps Malines fowls were made use of in some of the crosses. The peculiarity of fowls of this breed is that those containing Light Brahma blood have the plumage color of that variety; those largely Dorking, favor the Dorking color; and the same is true of those of the Cochin, the Cuckoo, or the Malines crosses.

29. Development.—The Faverolle fowls were developed in France for egg production and for market. As the result of development, they lay large, tinted-shelled eggs, and the carcass, for all market purposes, can scarcely be excelled. They have been adopted by the fanciers of England for exhibition purposes, and are described as such in the English Standard. They are but sparingly bred in America.

30. History.—To meet the demands for large size in market poultry, the poultrymen of France crossed Cochin, Brahma, and Dorking fowls into the common fowls of the land. From these crosses, the offspring most likely to prove satisfactory as market poultry were selected. The characters of the Dorking, the Cochin, and the Brahma were most favorably

considered, and from among these four varieties were selected—the Cuckoo Faverolle, the Dorking Faverolle, the Saumon, or Salmon, Faverolle, and the Light, or Brahma, Faverolle. The Salmon Faverolle has become the most popular variety.

31. Description.—The type of the Faverolle can best be understood after a study of the color illustration of these fowls. The English Standard describes one variety that is commonly known as the Salmon Faverolle, the color of which is: Beak, horn color or white; eyes, gray or hazel; comb, face, wattles, and ear lobes, red; shanks and feet, white; plumage of the males, beard and muff, black; hackle, straw color; back and shoulders, a mixture of black, white, and brown; breast, body, tail, and shank feathering, black; secondaries, white on the outer edge of the feathers and black on the inner edge; primaries, black. In the female, the beard and muff, breast, thighs, and fluff are cream color; the rest of the plumage is wheaten brown, and the neck hackle is striped with a darker shade of the same color. So far but few of these fowls have color so nearly perfect as the Standard describes. The general color of the males of this variety is like that of the Dorking male. The female is a mixture of yellow or cream and salmon color.

A number of varieties are mentioned as existing in France. Of these, there is a variety that is said to be entirely, or almost entirely, black in plumage. The light variety copies in a moderate way the color and markings of the Light Brahma. The Cuckoo Faverolle is mentioned as a variety having plumage color resembling the markings of the Barred Plymouth Rock. Presumably, from its color description and photographs, the Cuckoo Faverolle and the Malines of the same color are alike. The weights are as follows: Cocks, 7 to $8\frac{1}{2}$ pounds; cockerels and hens, 6 to 7 pounds; pullets, 5 to 6 pounds.

32. Mating.—In describing Faverolle fowls suitable for mating, an English fancier, who has been successful with them as exhibition fowls, advises the selection of fowls of both sexes that have perfect single combs of medium size and evenly serrated. Fowls of this breed inherit faulty combs from their ancestors, and to avoid the recurrence of this blemish in the off-

spring requires careful breeding. The second feature of importance is beard and muff. These must be almost perfect, or the fowls will have a ragged appearance about the head. Otherwise, form and color as described in the Standard should be selected as nearly as can be, and these mated; the best offspring should then be selected and remated with the object of establishing a strain that will breed true to form and color. The color most admired in the females is what game fanciers call wheaten color, with the exception that in the Faverolle it is called wheaten brown. An effort is being made to have the plumage color of the males resemble that of the Silver Duckwing males, and the females resemble the Wheaten Game females, as nearly as possible.

WHITE FAVEROLLE

33. Origin and Development.—The **White Faverolle** fowls are thought to have come originally as sports from the other varieties of Faverolle fowls, presumably from the Light Faverolle. They have been developed since 1907 by the poultrymen of England, who have given marked attention since that time to their improvement.

34. History.—Some Faverolle fowls produced offspring that were white or almost white in plumage color. Some of these white offspring were selected and mated about 1905 for the production of the White Faverolle. As a result of breeding from these carefully selected fowls some fairly good white fowls were produced. Some of these were mated with the best of the Light Faverolle, others with the best of the Salmon Faverolle. From these matings offspring were produced that had the proper size and shape and white plumage color, and from them the distinctive breed characters of the Faverolle were well established in later offspring. The excellence of the Faverolle quality in the White Faverolle is shown in Fig. 1.

35. Description.—White Faverolle fowls are the same in form as the other varieties of the same breed. They, like the old or original Salmon Faverolle fowls, are very short in leg,

heavy in body formation, and have very large muffs about the throat. They are more like the Dorking than the Orpington type, although, in form, they are different from any of the American or English fowls. They are very long in body, deep and full in breast, have a long breastbone, and are wide between the thighs. Their plumage is pure white. The skin, flesh, shanks, and toes are of a delicate pinkish white.

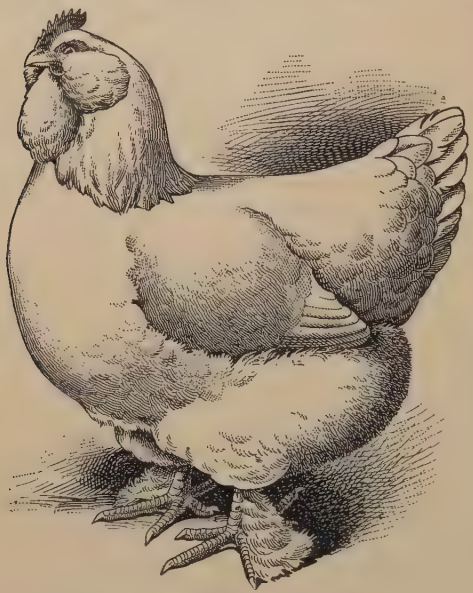


FIG. 1

36. Mating.—In mating White Faverolle fowls for the production of exhibition offspring, males and females that have pure white plumage and the very best Faverolle breed characters should be selected. It will be possible to make more rapid advancement in the development of a strain of this variety if yearling hens instead of pullets are selected for mating with well-grown cockerels. In this variety, only the best that have been bred should be selected for breeding; by consistently following this policy year after year great improvement may be made in these fowls.

POLISH

ORIGIN

37. Fowls with tufts of feathers on the top of their heads and a growth of feathers beneath their beaks have been mentioned for centuries. Naturalists refer to a crested fowl that was mentioned and illustrated by Aldrovandi in the 16th century. This was a large fowl having a crest that was fan-shaped and flat, not oval or round as at the present time. These were called Paduan or Patavinian fowls. Moubray said of them in 1816: "The Poland fowls, as they are generally called, were imported chiefly from Holland. Their color was shining black, with white tops on the heads of both cocks and hens. Their form is plump and deep, and the legs of the best species are not too long. Perhaps the genuine sort has always had five claws and, as the Poland cocks will occasionally produce white stock from white English hens, it is not improbable, the similarity of form likewise considered, that our famous Dorking breed may have been originally raised from that cross."

There is no doubt that the original tufted Hamburg fowls and the fowls mentioned by Dixon and others as having crests, all belonged to the same family. Polish fowls have always been more commonly bred in France than elsewhere. They were made use of in crosses from which the crested fowls of France originated. That they were bred in Spain at an early day and distributed from there into other countries is now admitted. In France, they have been cultivated for utility purposes; in England and in America, only as exhibition fowls. The earliest record of them calls attention to the peculiar skull formation, which is illustrated in Fig. 2. The drawing was made from a dissected head. There has been but little change in the skull formation during the past 60 years. The

skull formation shown was accepted as evidence of the existence of a crested jungle fowl.

Early authorities have mentioned ten varieties of Polish fowls: White-Crested Black; Golden, bearded and unbearded; Silver, bearded and unbearded; Cuckoo, bearded; Gray or Grizzled, bearded; Black-and-White Spangled, unbearded; Blue, with white top knots, unbearded; Yellow Spangled, bearded; Black-Breasted Black, bearded; White, bearded.

FIG. 2

At the present time but eight varieties are recognized: White-Crested Black, Buff Laced, Bearded Golden, Non-Bearded Golden, Bearded Silver, Non-Bearded Silver, Bearded White, Non-Bearded White.

In England, the White-Crested Blue Polish is included in the Standard. Originally Polish fowls had **V**-shaped, or antler, combs the same as the Crevecœur and La Flèche, but from careful breeding and perhaps from the influence of the feathers growing entirely over the head, many specimens have no combs, or combs so small as to be almost imperceptible among the feathers.

WHITE-CRESTED BLACK POLISH

38. Origin.—All Polish fowls have a common origin, which has been told. The **White-Crested Black Polish** was originally more common than any of the other varieties. As described and illustrated in early publications, they had but little crest. Those with beards might be described as having a few feathers growing the wrong way beneath the beak. As they now are, they were originated by poultry fanciers of America and England.

39. Development.—The recent development in the White-Crested Black Polish began about 1880, at which time

White-Crested Black Polish

fully one-fifth of the crest was composed of black feathers and most of them grew in front. Since that time, improvement has been made in form and plumage color, and their crests are more than twice the former size.

40. History.—Crested fowls were plentiful at an early date throughout all sections of the world where poultry was raised. At that time, the fowls were not pure black in body plumage, nor were their crests large or entirely white. The English fanciers were the first to cultivate them as exhibition fowls. Later, marked interest in their improvement was shown in America, and between 1880 and 1890 many of them were bred in the United States. Of recent years fewer of them have been bred, but the quality has been improved.

41. Description.—The Standard describes all Polish fowls as having the same body formation, yet they do not all conform to the one shape description. The Standard describes them as fowls of medium size, having an upright carriage and resembling the Spangled Hamburg more than any other fowl. In breast and body formation, including the abdomen, they are plump, as well as full and well rounded. Their peculiarities are the crest and beard, which should be large, full, and of globular formation. The carriage of the head and tail is shown in the color illustration. The difference in the appearance of the varieties is governed largely by the size of the crest and beard, or of the crest alone in the non-bearded varieties.

The plumage of the White-Crested Black Polish is rich metallic black throughout, with no white or foreign color of any kind, except in the crest, which is pure white with a few black feathers bordering the front. The shanks and toes are dark blue or almost black; the comb, face, and wattles are red. In the English Standard, the eyes are described as red; in the American Standard, as brown or black. The ear lobes are white and the beaks dark.

42. Mating.—The best results in breeding White-Crested Black Polish fowls have been obtained from mating the most perfect individuals and selecting and remating the best offspring for the establishment of a strain that will produce

offspring having Polish breed characters, black body plumage, and large white crests of perfect formation, with as little black as possible about the edges. The chief difficulty in breeding fowls of this variety is to separate and hold the white in the crest without any of it appearing in the flights or in any part of the body plumage. In addition to this, records must be kept of both parents of all offspring so as to separate and mate them to avoid inbreeding as far as possible.

In caring for fowls of this breed, special attention must be given to protect them from cold, dampness, and rain. If the crests become water-soaked, the fowls are apt to take cold, unless the crest is dried or the fowls are kept in warm quarters. During the breeding season, the crests may be trimmed about the eyes or clipped to within an inch of the head. A split crest is most undesirable. This may be corrected by binding up the crest and leaving it bound during the breeding season. It is best not to use for breeding purposes fowls that have split crests. If, however, they have other desirable qualities, the fault may be corrected. When the crest is bound up in this way, it should be opened at least every 3 or 4 weeks and thoroughly cleansed by washing; it should then be dried and bound up again. This is to prevent filth from gathering and irritating the head, and also to soften the skin and flesh of the head and influence the next growth of feathers.

BUFF LACED POLISH

43. The differences in description in the English and American Standards are greater in the case of the Buff Laced Polish than in the case of the other Polish varieties. In the American Standard they are called Buff Laced Polish, and in the English Standard, the Chamois, or White Laced, Polish. They are really buff-colored fowls with white markings. In some instances they are buff, marked with white in body plumage, and have white predominating in the tail feathers. The body color is very light in females and almost a cinnamon buff in males. Formerly, many of the females were of a light lemon color, with the body color and lacing so similar as to be scarcely

distinguishable. Some were buff and white spangled or mottled more like the Ancona than the present Buff Laced Polish.

44. Origin.—The Buff Laced Polish fowls are thought to have been originated by crossing the golden with the white Polish. Early writers mention a buff Polish. Dixon refers to the muff or beard as an early appendage mentioned by Albin in 1736 as whiskers; he describes it as a tuft of feathers that covers the ears. Naturally there would be buff Polish where the golden Polish existed, but the present Buff Laced Polish fowls are extremely artificial and have been made by fanciers who worked to make them beautiful.

45. Development.—The Buff Laced Polish fowls have been developed from the badly marked buff and white varieties of early days, step by step through a period of buff and spangled plumage, to buff plumage tipped with white.

46. Description.—In body formation and shape of crest, the Buff Laced Polish is the same as the other varieties of Polish fowls. The general make-up and plumage color of this variety is shown by the color illustration of Buff Polish Bantam fowls. In the males, the under portion of the feathers of the crest is white, and the web is buff, laced with white. The rest of the plumage of both males and females is buff, laced with white.

47. Mating.—The mating of Buff Laced Polish fowls for best results is a difficult task. The males naturally have a darker shade of buff than the females. As the result of careful selecting and mating, a few males and females of nearly the same shade of color have been produced. Fowls as nearly alike as possible should be chosen for mating; when it is impossible to get fowls nearly alike, the best that can be selected for shape, crest, and plumage color should be mated, and their offspring remated continuously in an effort to improve plumage color.

BEARDED GOLDEN POLISH

48. The variety called **Bearded Golden Polish** by the American Standard is known by several names; the English Standard calls it the Gold Polish; and some writers call it Spangled Polish. On account of the marking of the plumage, it might appropriately be called Laced Polish. All of these refer to the variety of Polish that has markings such as are shown in the color illustration of the Bearded Polish.

49. Origin and Development.—Originally, the Bearded Golden Polish were spangled. As they now exist, they are thought to have had a common origin with the Spangled Hamburg; that is, the same process was followed in making the present Spangled Polish and the Spangled Hamburg. All Polish fowls had the one common origin as previously described. The Bearded Golden Polish described in the American Standard has been made from the crude originals, which had a few feathers, called a topknot, growing on top of the head, and a few feathers called whiskers growing under the throat. As a result of careful selection, mating, and breeding, fowls such as are shown in the color illustrations of the Bearded Polish have been produced.

50. History.—From the beginning of poultry exhibitions, Polish fowls have attracted attention throughout the world. The Spangled Polish has always been an attractive variety. The golden variety is thought to be the original, and the silver variety is supposed to have been made from it. Evidence that seems to favor this is that fowls of the silver variety have been bred from the golden variety, but fowls of the golden variety have never been bred from the silver variety. The silver variety is far more popular and more generally bred than the golden variety, and since buff varieties of other fowls have become popular, the buff variety of Polish has also become more popular than the golden variety. The best of the Bearded Golden Polish have been bred in England and Canada, but in recent years some good ones have been produced in the United States.

51. Description.—The Bearded Golden Polish has a crest of large size and but little comb. The crest of a fowl of the bearded varieties is usually larger than that of the non-bearded varieties. The beard, which grows beneath the beak, is separated into three parts, one part hanging down between the wattles, and the other parts growing from the cheek below the eyes on to the side of the neck. The hackle in the male is long and flowing, and in the female appears to be more a part of the body plumage than a separate division. The saddle plumage in males is long and flowing; the tail is very full; the main tail feathers are well spread; the main sickles extend beyond the main tail feathers; the covert and saddle feathering is profuse. In the females, the tail is well spread and is surrounded at the base with double rows of coverts. The breast and body are round and full. These fowls should be wide between the thighs and have a medium length of shanks.

The plumage of both males and females is golden bay throughout, each feather laced with brilliant black; the under plumage is dark or black. The crest of the male is black in under plumage and golden bay in surface color, tipped with black. The crest of the female is like her body plumage. The hackle of the male is tipped or striped at the ends with black. The muff of cockerels is usually dark, approaching black, but showing more of the golden color as mature cocks. The markings of the wings form a double bar and a wing bay in both males and females. The shanks and toes are dark blue; the eyes are dark. The plumage color of this variety is more in conformity with that of the Laced Wyandotte than of any other fowl.

52. Mating.—The rule of mating to be followed to produce Bearded Golden Polish exhibition offspring is that like will produce like, or that the best offspring will come from fowls that are almost perfect according to Standard description. The rules for mating Bearded Silver Polish will apply to this variety, color excepted.

NON-BEARDED GOLDEN POLISH

53. Whether the Bearded or the Non-Bearded Polish have the priority claim of originality cannot be settled. If the Paduan fowl of Aldrovandi is the ancestor of all Polish, not only was the original fowl without muff or beard, but it had a fan or lark crest (a narrow strip of feathers that grew on the top of the head like a single comb), as shown in Aldrovandi's original picture of the Paduan hen, which is given in Fig. 3.

Game fowls having beards were illustrated in the 16th century. Some having a small tuft of feathers on the top of the head back of the comb were illustrated at about the same time. The term *muff* has been used for a certain breed of game fowls of an early day. That fowls with crests and no beards, fowls with beards and no crests, and fowls having both beards and crests have been known for centuries is an established fact; yet, in the absence of proof other than the knowledge of the early existence of the Paduan fowl, it is fair to conclude that they might have existed originally with both or with one, and yet may have belonged to what might be called the Paduan family.

FIG. 3

54. The **Non-Bearded Golden Polish** fowls are the same in every way as the Bearded Golden Polish, except that they have no beards or extra growth of feathers of any kind under the throat; the absence of this gives them as trim an appearance as is shown in the White-Crested Black Polish. Their origin and development are the same, and to produce form and color, they may be mated the same as the Bearded Polish. They have not been bred in such large numbers, nor are they equal favorites with the Bearded Polish.

Bearded Silver Polish

BEARDED AND NON-BEARDED SILVER POLISH

BEARDED SILVER POLISH

55. Origin.—The **Bearded Silver Polish** variety has the same origin as other varieties of the Polish family. The color of these fowls has been established by years of careful breeding.

56. Development.—Careful breeding has developed the Bearded Silver Polish into the type of fowl shown in the color illustration.

57. History.—The history of the Bearded Silver Polish variety is identical with that of the Bearded Golden Polish variety.

58. Description.—The shape of fowls of the Bearded Silver Polish variety is shown in the color illustration, and their general make-up as to crest, beard, and body formation is identical with that of the Bearded Golden Polish; but in color they differ materially. The body color of this variety is white or silvery white; the under plumage is dark or slate. The crest of the male is black at the base, or in under plumage, and silvery white in the web, which is tipped or spangled with black at the points. In the finest males, the crest feathers are laced with black. The hackle of the male is silvery white, laced with black. The entire body color of the males and females is white, as in the Silver Sebright, and is marked with Sebright lacing of black. The main tail feathers are white, laced with black; the wing bow, wing bar, wing bay, flights, and secondaries are white, tipped or laced with black; the females have a double row of tail coverts with large white centers laced with black; the saddle plumage of the male, including the tail coverts and sickle feathers, are long and flowing, and are white, edged with black. The shanks and toes are blue or slaty blue.

In the cockerels and pullets, the beard and crest are darker than in mature fowls. The crest, in both males and females,

should be perfect in formation, without breaks or separations of any kind. The center coloring and lacing of both the Bearded Golden and the Bearded Silver Polish are more like the plumage of the Silver and Golden Sebrights than like that of other laced varieties. The only difference between the Bearded Golden and the Bearded Silver Polish is in the ground color, which is golden bay in one and white or silvery white in the other.

59. Mating.—In mating the Bearded Silver Polish, success can come only from fowls of the best quality. The color and markings are similar to those of the Silver Sebright, and are quite as difficult to produce in their purity. The mossing of feathers, which is the term applied to black appearing in the center of the white, is difficult to obviate. If the parents are deficient in black markings, they are apt to produce offspring with plumage that is much too light for exhibition. In selecting males for breeding, only those of large size and of perfect breed characters should be considered, and they must have large oval crests of perfect formation. In the Bearded Silver Polish the growth of feathers beneath the beak must not only be profuse but regular in formation. These feathers should be dark and be marked with white.

The feathers of the body must have clear white centers and be laced with a narrow edging of black that glistens with sheen. Tail coverts and main tail feathers must be marked as shown in the color illustration. The same color and markings must exist in both the Bearded Golden and the Bearded Silver Polish. The females used for breeding should be hens in their second or third year that have sustained their color and continued to be of good form and of perfect color markings. Their crests must be globular in form and have a proper distribution of white and black; the feathers in the body plumage must be clean and clear in the centers and be evenly laced with a narrow line of glossy black. Care must be taken to select fowls that have the proper shade of color in the under plumage, and shanks and toes that are smooth and have a clean, clear, slaty-blue shade.

NON-BEARDED SILVER POLISH

60. The **Non-Bearded Silver Polish** is the same in every way as the Bearded Silver Polish, except for the beard. It is claimed that both the Bearded and the Non-Bearded Silver Polish fowls have been bred from the same matings. Whether or not this is true has not been proved; but it is known that Houdan fowls without beard or muff have been bred from the same matings that produced offspring having beautiful crests and full beards. The bearded varieties of fowls usually have more profuse feathering in the crest than the non-bearded fowls. This is a natural result of selecting and breeding for a profuse beard. Selecting for non-bearded matings would naturally result in less profuse feathering and less crest; otherwise, the matings for this variety are the same as for the Bearded Silver Polish.

BEARDED AND NON-BEARDED WHITE POLISH

BEARDED WHITE POLISH

61. Origin.—The **Bearded White Polish,** although having a common origin with the other varieties, has come as white offspring from the silver variety of bearded Polish. They are also said to have come from the black variety, but the most acceptable solution of their origin is that specimens that were white or nearly so were selected and mated for white plumage.

62. Development.—The Bearded White Polish fowls have not been developed to a quality equal to that of the other varieties. Their plumage color is so plain, not even the little red in the head points showing to embellish them, that they have not been favorites.

63. History.—The history of the Bearded White Polish conforms to that of the other varieties of Polish.

64. Description.—The Bearded White Polish fowls have the same breed characters, crest, beard, and body formation

as fowls of the other bearded varieties. The only difference is in the color of their plumage, which is pure white throughout. Their eyes are reddish bay; their face and wattles are red; their ear lobes, white; their shanks and toes, blue or slaty blue. The comb and wattles of all varieties of Polish are red; their ear lobes are white or red and white; and their eyes are red or reddish bay.

65. Mating.—In the mating of Bearded White Polish unusual care must be given to selecting both males and females that have pure white plumage and shanks and toes of a clean, clear slaty-blue shade, with smooth surfaces. Breed characters must be marked in these fowls, and the beard and crest of both males and females must not only be profuse but of large size and perfect formation. There are no color or markings to select for in this variety, and the only requirements are perfect form, proper size, and clean, clear color in plumage, shanks, and toes.

NON-BEARDED WHITE POLISH

66. The **Non-Bearded White Polish** fowls are identical with the Bearded White Polish, with the exception that the beard is absent. Otherwise, they should be selected for exhibition and for breeding the same as the Bearded White Polish. Offspring having crests and fairly good beards, others having crests and but little beard, and still others having crests of medium size and no beard, have been bred from the same strain of Polish. It might not be safe to state that all three kinds have been bred from a single pair, but it may be said that offspring having full crests and beard and offspring with fairly good crests and but little beard have been bred from a single pair of White Polish.

MISCELLANEOUS

SULTAN

67. Sultan fowls, which have more peculiarities of form than any other fowls, have been called the Polish fowls of Turkey. They originally had but little beard, but this has been developed until they are now heavily bearded. They are white fowls of medium size and came from the Oriental countries.

68. Origin.—It is reasonable to suppose that Sultan fowls originated in Turkey, although they may have come from other parts of the Orient. The Sultan and the Silky fowls may have originated in the same place.

69. Development.—So few Sultan fowls have been bred and so little attention has been bestowed on their development that but little progress has been made in their improvement.

70. History.—The history of the Sultan fowls contains the statement that they were brought from Constantinople about 1850. Only a few of them were brought into England, and a search in Turkey yielded no fowls of superior quality. Those originally brought from Turkey were of medium size; in shape and appearance they are much like the white variety of Polish, but they had feathers growing above their eyes, something like a mustache, as well as a slight growth of feathers below the eyes and under the throat, like a beard. They had vulture hocks; shanks and toes feathered; white plumage; and five toes. To improve the quality and retain vitality, they were crossed with the White Polish. Just how they have been bred during recent years cannot be told. Those recently exhibited at poultry shows have the form and appearance of an overgrown Booted White Bantam.

71. Description.—Sultan fowls should have the general appearance of Polish fowls. The males have a large, round crest, with a small growth of feathers near the front of the crest on each side of the comb, which gives the appearance of a heavy mustache, and in front of this is a V-shaped comb; growing from both sides of the beak are feathers conforming to the side growths of the beard in Polish fowls; beneath and between the wattles is a beard; they have a long, flowing hackle, full breasts, short backs, and profuse tail feathers. The females conform to this description in an effeminate way. The wings of both males and females are large and strong, hanging down below the line of the hock; vulture hocks grow from the joint, and in many fowls drag on the ground. The shank and toe feathering is like that of the Cochin. They have five toes on each foot; blue shanks and toes like the Silky, and pure white plumage throughout. The males weigh about 5 pounds, and the females about 4 pounds. The Standard states that both thighs and shanks shall be short; accordingly, the fowls seem to have a low-set carriage, but they really have considerable length in both thigh and shank, and stand quite erect.

72. Mating.—The only rule that can be applied in the mating of Sultan fowls is to select and mate the best that can be found.

FRIZZLE

73. Origin.—In writing of **Frizzle** fowls, Moubray, in his "Treatise on Domestic and Ornamental Poultry," states: "This fowl is not infrequently called 'Friesland,' under the popular but erroneous idea that it has been brought from that country. It is, however, thought to be a native of Batavia, in the island of Java, and is found in Japan, Sumatra, various parts of Southern Asia, and the Philippines. It derives its name from the peculiar characteristic plumage, the feathers being curled or frizzled, and presenting the reverse way to that of ordinary fowls. The prevailing color is white, and it is stated that there are specimens of almost every shade from a

gray or dun color to a brown or even black. The feathers on the back of the head form a sort of erect crest over an ambiguous comb that is indented and of dual formation, connected at the base but extending laterally apart."

74. Development.—The Frizzle fowls have been developed only to the extent of breeding a few without regard to special form or color.

75. History.—Frizzle fowls have been fairly well distributed throughout the world and have been described in the American Standard since its beginning. The Japanese have made from them fowls of miniature size that are even more striking in their peculiarity of plumage than the larger fowls. T. Farrar Rackham, of New Jersey, bred a strain of Frizzle fowls that produced specimens of remarkable quality, with buff plumage color. The hood in these fowls was so highly developed as to form a crescent about the head; the combs were single and fairly well formed.

76. Description.—Frizzle fowls should conform to the size and type of the American breeds. They should be black, bay red, or white; whatever their color, it must be even and true throughout. The combs should be single; all the feathers should have a tendency to curl in the opposite direction from that usually followed in poultry. The most popular varieties are the pure black, the pure white, and the red, which are in fact of a reddish-buff or cinnamon color.

77. Mating.—Frizzle fowls that are used for producing exhibition offspring should have compact body formation, perfect combs, and profuse feathering that is curled as much as possible. The Rackham strain was made after years of careful mating, by selecting and mating the best offspring produced each year. This method was followed until the offspring had feathers that rolled like shavings and were so intense about the head as to form a hood. By continually selecting the best, these features might be intensified to almost any degree.

SILKY

78. Silky fowls, or Silkies, as they are commonly called, are oddities. Early writers speak of them as having come from India and China, and some trace them to Japan and the Philippines. Fowls having plumage the same as the Silky have occurred among the Cochin and other breeds. One peculiarity of these fowls is that their plumage is more like wool or hair than like feathers. They are mentioned as having white plumage, black plumage, and brown or rust-colored plumage. Another of their peculiarities is the color of the skin and flesh, which is a dark violet or blue, and extends to the bone. Their general appearance was originally like that of the early Cochin, and at that time they had but little crest and but few feathers on the shanks and toes. They are now considered among the miscellaneous fowls of the American Standard. By common consent, they are usually exhibited among the bantams and will be more fully described with the miscellaneous bantams. They are mentioned here only as a member of the crested family.

YOKOHAMA

79. Yokohama fowls were called Phœnix by the Germans; they have been known also as Long-Tailed Japanese Game and as Long-Tailed Japanese fowls. They are thought to be among the oldest types of fowls, and it may be that they are of the same race as the Black Sumatra.

The original variety color of this breed is thought to have been that of the Duckwing, as this variety is the most plentiful. Fowls of this breed are said to have existed in Japan with tail feathers over 12 feet long. Males with sickle feathers more than 7 feet long have been seen in America.

80. Origin.—Japan is undoubtedly the original home of this remarkable breed of fowls, and they are known there as the Tosa fowls. No other definite information can be gained relative to their origin.

81. Development.—The Japanese have developed the Yokohama fowls for beauty of plumage and for length of tail feathers. In Japan they are kept in cages on elevated places to prevent their plumage from becoming soiled and to encourage greater length. The modern development of this breed has been made in England.

82. History.—The first of the Yokohama fowls that attracted attention were those mentioned in 1874 as having been seen in France and in Germany. Later, a few were brought to America and some have been scattered throughout the world; but little attention was paid to their breeding prior to the organization of the Yokohama Club of England. Since that time a standard has been compiled in England, and they have been so much improved by selection and careful breeding as to have been separated into a number of varieties, the most popular of which are the duckwing, the spangled, and the white.

83. Description.—In general body formation, the Yokohama is more like the Sumatra than other fowls. The neck is long and beautifully curved; the tail, long and flowing, with an abundance of side hangers; the sickles and coverts, narrow and hard; the entire tail forms a graceful curve and is carried rather low. The tail feathers of cockerels range from 2 to 3 feet long, and those of mature males from 4 to 6 feet, and, in a few instances, somewhat longer. The females are almost identical in body formation with the Black Sumatra. The long tail feathers and coverts of females have a graceful curve somewhat like the coverts of the males. The carriage of both is described as pheasantlike. The fowls are long and extremely graceful. Males weigh from $4\frac{1}{2}$ pounds to 6 pounds; females, from $2\frac{1}{2}$ to 4 pounds.

The Golden and the Silver Duckwing Yokohama fowls have plumage color the same as the corresponding varieties of game fowls. The Spangled Yokohama fowls are white and black in plumage, the black marking for the greater part running lengthwise of the feathers, which are white. The wing bows of the male are white, and the wing bars are black, with a white

lacing. The tail feathers of the males and females are black, laced more or less with white. The White Yokohama has white plumage throughout. The wattles and ear lobes of all varieties are red, but little if any of the wattle showing. More value is placed on carriage and length of tail than on the variety color.

84. Mating.—In the mating of Yokohama fowls for best results, more attention must be bestowed on body formation and length of tail in both males and females than on plumage color. Selection can be made from among the best that have been bred; these should be mated, their offspring remated to increase the length and beauty of the tail feathers, to maintain variety color, and to improve vitality. The profuse growth of feathers can be maintained only in fowls that are perfectly healthy and possess all the vitality that can be obtained in the breed.

NAKED NECK

85. A peculiar breed of fowls called **Naked Neck** has come from Austria, where it is said to have originated. The name comes from the fact that the fowls are destitute of feathers from within an inch or two back of the head down the entire length of the neck and on to the shoulders. This peculiarity of plumage is very marked, and the neck and shoulders have an unnatural appearance. They are not attractive; in fact, they are very unattractive, and the peculiar sensation to the hand when grasping the naked portion of the neck is very unpleasant. The skin of the neck is smooth, and, when exposed to the sun during the summer months, turns red and has a raw appearance, as if the blood were gathered beneath and close to the skin. They are very hardy; are but seldom seen, and have been bred in America only as novelties. The illustration of these fowls shown in Fig. 4 was made from a pair resulting from a cross of a full-blooded Naked Neck male and Barred Plymouth Rock hens.

RUMPLESS

86. The **Rumpless** fowls are very ancient. Tailless fowls were mentioned by Temminck in his earliest writings. They are also mentioned as the Rumpless or Persian cocks of Latham. Nearly 300 years ago this variety was known to Aldrovandi, who called them Persian fowls.

Sonini and Temminck state that this fowl is a native of the Ceylon forests and is called by the natives Wallikikilli

FIG. 4

or Cock of the Woods. This statement is disputed by E. L. Layard, who, when writing from Ceylon in 1850, says that the Rumpless fowl is not a wild inhabitant of the island, but is a rare, tame introduction from Cochin. That they did exist and do exist at the present time cannot be denied, but from what and from where they originally came is uncertain.

Rumpless fowls are bred in several variety colors, and they are usually quite like the Brown-Red and the Duckwing Game fowls in color. Recently, some of them have been bred by Professor C. B. Davenport, Director of the Station for Experi-

Fig. 5

mental Evolution, Cold Spring Harbor, Long Island, New York. In variety color these are like the Duckwing Game fowls; they have no tail feathers, and appear as if the rump were cut off. At the left in Fig. 5 is shown a Rumpless female, and at the right a Rumpless male.

GAME FOWLS

INTRODUCTION

1. It is generally conceded that the game fowls were the ancestors of all the domestic fowls. As wild fowls, they must have been capable of defending themselves from their natural enemies. Whether the miniature type of the jungle fowls, as we now know them, or the mammoth type of the Malay is considered, the same natural conditions would exist. The pugnacious character of these fowls has gained for them the name of **game fowls.**

As classed in the American Standard, they are *Games*, and in the English Club Standards they are now *Game*, *Modern Game*, and *Old-English Game*, the Modern Game of the English Club Standards conforming to the exhibition game fowls of the American Standard. The Old-English Game of the English Club Standards is the Pit Game of America, which is not recognized in the American Standard.

Games, as defined in the American Standard, are the modern types of game fowls that have been developed from the Old-English, or Pit, Game type. Five stages of the development of game fowls are shown in Fig. 1. This illustration shows the changes that have occurred from time to time, as depicted by the artists of the day, and, although they may not be absolutely correct, they reflect the character of the fowl as bred for exhibition since 1800.

2. In addition to the modern type of game fowl for exhibition, the American Standard admits the Indian Game (under the name of the Cornish Game), the Black Sumatra

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THE EVOLUTION
of the
MODERN EXHIBITION
GAME
1812
1837
1850
1875
1911

FIG. 1

Game, and the Malay Game. The Aseel Game, which is perhaps of equally ancient origin with the Malay, has not been admitted to the American Standard, neither has the Old-English Game. Both of these, however, are bred to standard, and numerous varieties are mentioned in the club standards of England.

To follow the form made use of in the description of other breeds and varieties, the game fowls described in the American Standard will be considered as of four general classes, namely, *Exhibition Game*, *Cornish Game*, *Malay Game*, and *Black Sumatra Game*. The *Aseel Game* and the *Old-English Game* will be considered as non-standard varieties.

EXHIBITION GAME

GENERAL DISCUSSION

3. With the beginning of poultry shows in England, the Old-English Game was the only type of game fowl, and fowls were shown in the varieties that are now considered as standard. Gradually, and with great care, the type was altered. At first the changes took the form of more nearly perfect plumage color. Lewis Wright, in his "Book of Poultry," states that at first changes in both color and form were very moderate. He says: "Exhibitors and judges alike understood that the game fowl was different somehow from the breeds that were often termed, in comparison, 'the heavy, cart-horse style.' The tendency was natural to prefer the somewhat taller and more reachy fowls; and to a certain extent, the modified type did naturally, although confined to the earliest and more moderate degree, appeal even to the general public with a beauty of its own, and was welcomed by many for the very reason that it was somewhat different from the original cock-fighting model."

The first change in exhibition game fowls worthy of note was in 1850. At that time they had much the same body formation that now belongs to the Old-English Game, with the

exception that the separation of color was more pronounced, their carriage was less erect, and their combs and wattles were more closely trimmed than was usual for the Old-English Game. From then to 1875, greater differences were found in body formation, length of shanks, and carriage of body and tail. About that time the first mention of the "slim tail" occurred. The Standard of 1875 describes the tail of the male as being carried well together and at a moderate elevation. The thighs and shanks were rather long. From then to the present time, the development has been gradual. The type of exhibition game fowls most admired at this time is shown in the color illustrations.

The Black-Breasted Red Game has always been considered the model in form and color, and is, perhaps, the original from which all other game fowls have descended. The games are described in alphabetical order. The origin and development of the exhibition game fowls is told in connection with the discussion of the Black-Breasted Red Game, and the origin and development of each variety will be given under its proper heading.

4. One of the important requirements in the breeding of exhibition game fowls is the selection of both males and females with the breed characters of the modern exhibition game fowls. One of the breed characters of exhibition game fowls is large bone formation in the shank and thigh, and to produce this in the offspring they must have certain environments that cannot be found in all localities. A limestone subsoil is well suited to them, and they will grow quickly in localities where this condition exists. Persons experienced in breeding game fowls have failed with them in some localities and have succeeded remarkably well in others.

To succeed in the production of game fowls, not only must the matings be of the best and the feeding for bone development be well suited to them, but the care and surroundings must be such as to make them prosper. It is almost impossible to breed exhibition game fowls in damp places.

BIRCHEN GAME

5. Origin.—The **Birchen Game** was made by mating fowls of two varieties, the Brown-Red Game and the Silver Duckwing Game, and then selecting and remating the offspring for the production of a fowl in almost exact contrast to the Brown-Red Game. Judging from the various claims that have been made, several kinds of matings were effected to produce them. The original, perhaps, from which the present Birchen Game has descended was known as the Silver Birchen Gray Game. By crossing fowls of this variety, which were more or less like those of the Silver Duckwing Game variety, with Brown-Red Game fowls having a pale lemon or straw color, the birchen color was obtained.

6. Development.—The recent development of the Birchen Game fowls has been more rapid than might have been expected, due to the fact that they breed true to color. Good offspring of both sexes are produced from single matings, it being necessary only to select with care the fowls of this variety that have the type and color most admired; from such fowls, improvement is rapid.

7. History.—Birchen Game fowls have never been so plentiful nor so popular as fowls of other varieties. They have been considered as kindred to the Brown-Red Game fowls. It has been asserted that both Brown-Red Game and Birchen Game fowls of superior exhibition quality have been bred from a single mating, but this can scarcely be authenticated. When a Silver Duckwing Game or a Birchen Game male is mated to Brown-Red Game females, both Brown-Red Game and Birchen Game fowls have been produced, but not from the one hen.

8. Description.—The shape and general make-up of all exhibition game fowls should be the same; the only difference should be in plumage color. In the Birchen Game male, the top color, including hackle, back saddle, shoulder coverts, and wing bows, is silvery white; the feathers of the neck hackle are

marked down the center with a narrow stripe of black (a hackle free from black is most admired); the rest of the body plumage is a rich, glossy black; and the breast feathers have a narrow lacing of white, but this lacing grows narrower and narrower until none of it appears on the under part of the breast and body plumage.

The female Birchen Game has a light-colored hackle striped with black; the rest of the body plumage is black; the feathers of the breast are laced with white. The eyes of both males and females are black; the head and its attachments are dark purple, or *gypsy* color. The shanks and toes are black. The beauty of the Birchen Game is due mainly to the clean, clear, silvery-white top color of the male, the neck hackle of the same color in the female, and the narrow, silvery-white lacing on the breasts of both sexes. The main tail feathers of both sexes should be black; and the sickles and coverts of the male should glisten with sheen. The general body formation of game fowls is shown in the color illustrations.

9. Mating.—To succeed in breeding Birchen Game fowls for exhibition, it is necessary to establish a strain that can be depended on to reproduce good quality. To establish such a strain, only Birchen Game fowls of the proper type and color must be mated. When color needs strengthening, a Brown-Red male or female may be selected and bred into the strain. When this is done, the Brown-Red fowl should be as pale in markings as can be selected. To avoid too much lacing on the breast, males having but little of it can be used in the matings.

Other methods of mating, however, are followed. It is not unusual for Brown-Red Game, Birchen Game, Silver Duckwing Game, or Golden Duckwing Game females to be mated to either light-colored Brown-Red Game or dark-colored Birchen Game males for the production of exhibition fowls of several kinds. No dependence can, however, be placed on the breeding quality of even the most beautiful fowls that are produced in this way. It is best, for continued success, to keep the strains true and pure, only strengthening them when

necessary from the Brown-Red or the Silver Duckwing Game varieties, and to leave the chance matings and experimental work to those who have acquired this art by years of experience.

BLACK GAME

10. Origin.—The **Black Game** fowl was made by selecting and mating black fowls of different varieties of game fowls.

11. Development.—The development of the Black Game has been accomplished by selecting and mating the best game fowls that had black plumage throughout, and selecting and mating the best offspring for shape and color.

12. History.—Black Game fowls are considered more as a novelty than as a true variety. English writers of 50 years ago mention them as possibilities for the "any other variety" classes, but state that they are not considered a true variety in the same sense as the other kinds.

13. Description.—The Black Game fowls are black throughout, including the beak, shanks, and toes. The blacker the plumage and the greater the show of sheen, the more desirable they are. The eyes are brown; the face, wattles, and ear lobes, deep red, almost as dark a red as those of the Birchen Game fowls.

14. Mating.—In mating Black Game fowls, only those of the best form possible should be selected, and special attention, also, should be given to selecting those of pure, lustrous black plumage throughout, with considerable sheen, black shanks, toes, and beak, and dark eyes and face. If such fowls are systematically bred, it is possible to establish a strain of beautiful Black Game fowls that will consistently reproduce desirable offspring.

BLACK-BREASTED RED GAME

15. Origin.—In making the present type of **Black-Breasted Red Game** fowls, Malays were liberally used in the crosses. This was to give greater length of leg, to elevate the carriage, and to shorten the plumage and make it more compact, as well as to modify the color. These changes brought objectionable features, such as coarse heads, necks, combs, and eyes, all of which have been bred out by careful selection.

16. Development.—The development of the Black-Breasted Red Game fowls has been continued until a greater length of leg has been established than is found naturally in the Malay. These fowls have more erect carriage and a different shape of body than is found in other kinds of game fowls. They have been altered in color and body formation to such an extent that they have been transformed from dark-colored fowls with a heavy, low-set body to light-colored fowls of tall and slender proportions. The change in the carriage of the head and tail has also helped to give them a distinct appearance.

17. History.—The history of the Black-Breasted Red Game fowls differs but little from that of the other varieties of game fowls. With the banishing of the pit from royal patronage, the game fowl ceased to be generally admired. Then came the desire to make game fowls popular by producing beautiful specimens for exhibition. With this in view a beginning was made, and their improved form and color attracted the attention of persons fond of exhibition poultry. The first marked improvement was recorded when John Douglas, of England, won the cup at the Crystal Palace Show in 1870 with a Black-Breasted Red Game cock of such remarkable quality that it attracted world-wide attention. This variety was so changed as to make the game fowls of 1900 marvels in the way of exhibition fowls. This, however, deprived the average fancier of the pleasure of keeping game fowls, and a desire sprang up for a fowl less difficult to breed, with the result that the Old-English Game type was revived.

Black-Breasted Red Games

18. Description.—The carriage of game fowls is called *station*. A game fowl with good station stands in an upright or erect position and has a great length from the tip of the toe to the end of the beak. When a Black-Breasted Red Game fowl stands as it should for exhibition, an almost direct line can be drawn from the center of the eye down through the wing and along the thigh to the ground. The positions, or stations, of the game fowls most popular for exhibition are shown in the color illustrations.

In each of these illustrations a different position is shown, any one of which may be accepted as correct for a game fowl, and, although one of these positions is demanded for the exhibition pen, the fowls do not conform to this general make-up when seen in their natural condition. The exhibition type of game fowl is so largely artificial that it can acquire its most correct position only by careful training. The Standard describes the natural form and color of game fowls, but the type that wins in the show room is made by the fanciers best able to train them to assume the positions shown.

The modern exhibition game cock is of unusual length in every section; its carriage is upright, and it is active and alert. The comb, wattles, and ear lobes must be shaved off so close to the head as to give the head the appearance of having been skinned, thus making it long and flat on top and extending it to the point of the beak. The neck is arched and slim. The body formation is described as egg-shaped, the larger end of the egg being at the shoulders and the point of the egg at the rump. From the rump grows a slim, narrow tail, the main feathers of which are almost straight and very slender for the size of the fowl. The thighs and shanks are long, but there is a greater length in the thigh from the body to the hock joint than in the shank from the hock to the ground. The bones of the shank are strong, and the toes are well spread or separated, and no deformity of feet is permitted. The females should conform in a general way to the shape of the males.

The weight of modern English game fowls varies from 6 to 8 pounds, the lighter weight being that of pullets, and the heavier weight being that of the largest males.

The head points, including the eyes, are bright red; the beak, shanks, and toes are of a willow color. In the American Standard, the beak is described as horn colored; in the English Club Standards, as dark green. The hackle of the males is preferably orange yellow, but ranges from orange red to a light, golden color, with no striping; the back and saddle are rich crimson or bright red, with a lighter or golden-orange shade in the saddle; the wing bows range from orange to red; the wing bars are greenish black; the secondaries are rich bay on the outer edge and black on the inner edge and tips, the bay showing when the wing is folded; the primaries are black, with a bay edge; the body color is black, glistening with sheen; the main tail feathers and the tail coverts are black, glistening with sheen.

The hackle of the females is light orange or gold, striped with black; the breast is a rich salmon, shading to grayish brown on the thighs; the tail is black, the topmost feathers matching the body plumage; the rest of the plumage is of a rich partridge color, finely penciled with a slight golden tinge. This is the color demanded by the English Club Standards; the American Standard requires a grayish-brown body color, stippled with golden brown. Of whatever shade the body plumage of the female may be, it must be even and free from reddish shadings or lacing. The preference is given to an even shade of light brown throughout the body plumage, which is stippled with a shade of golden brown.

19. Mating.—Single matings of males and females of the best exhibition quality may produce remarkable results, but no fowls lacking in form or color should be used. To produce more certain results, double matings must be practiced and strains of male producers and female producers must be established. In mating for the production of exquisite color in males, a line must be established by mating and remating until the proper color is obtained. When this has been accomplished, no new blood should be introduced into a strain. A line for the production of females must be established in the same way.

The lighter and more brilliant shade of red in the males can be bred only from the brightest-colored males mated with females that have light lemon-colored hackles; but such males are likely to have too little color in the wing bays, back, and wing bows. This can be improved by selecting and breeding from only the best. Beautiful females will be produced from these same matings. The orange yellow in the hackle, back, and saddle plumage can be maintained only in this way, and no other variety should be crossed into them. The practice of using Wheaten Game fowls for breeding Black-Breasted Red Game males, and brick-red males for pullet breeding should be discontinued.

To have the clear, clean back and wing color so much admired in females with proper breast color, it is necessary to eliminate red from the body plumage. No females having red in the back or wing or lacing on the edges of the feathers should be used in matings for pullets; nor should males having deep-red plumage be used. Only females of the desired color should be mated with males having orange-yellow hackle and saddle plumage and a light-red top color.

BROWN-RED GAME

20. Origin.—The **Brown-Red Game** fowl was made from what were formerly known as Brown-Breasted Red Game fowls. Their ancestors were so called from the fact that the breast color of the males was brown or reddish brown. The color distinctions were at that time less pronounced than at the present. Having descended from the Old-English Game fowls of the same name, they inherited from them the reddish-brown color of breast and other markings peculiar to that variety.

21. Development.—The development of the Brown-Red Game fowls is described in connection with their history. They are perhaps more artificial than fowls of other varieties.

22. History.—With the development of the modern type of game fowls came a desire to have the Brown-Red Game more beautifully marked than formerly. Beginning with what was

known as starling-colored breast plumage, which was bay or brown or brown streaked with bay and a crimson top color, or a black breast with a narrow lacing of bay and a top color of orange red and crimson, they have been changed and improved until both males and females now have black breast plumage, the feathers being edged with a light lemon or straw color. In the transformation from the intermingling of red, brown, and black in breast and body plumage, and the same parts marked with bay, a fowl has been developed whose breast and body plumage is black, or as the English describe it, greenish black, and whose feathers are laced with lemon color. The Brown-Red Game fowls have never been as popular in America as in England; as bred in America, the bantams of this variety are of better quality than the larger fowls.

23. Description.—The English Club Standards and the American Standard differ somewhat in the descriptions of the color of the Brown-Red Game fowls. The English Standard states that the beak should be dark, preferably black; the eyes, comb, face, wattles, ear lobes, legs, and feet, black; and that there should be but two colors in the plumage—lemon and black. In the cock, the lemon should be rich and bright; in the hen, light; the black in both males and females should have a bright green gloss known as beetle green. The American Standard states that the beak and eyes should be black; the comb, face, wattles, and ear lobes, dark purple. The top color of males should be bright lemon. The feathers of the neck hackle should be striped through the center with black; the rest of the body plumage is black, the breast feathers being laced with lemon; the sickle and tail coverts are lustrous black.

In the females, the entire body plumage should be black; the neck hackles, lemon color, with a narrow striping of black; the breast feathers, laced with lemon. In both males and females, the lacing should extend down the breast, gradually growing less as it approaches the thighs. In some fowls, the lacing extends down the entire breast and on to the thigh. This, however, is not desirable, as it should end where the thigh joins the breast plumage.

24. Mating.—The mating of Brown-Red Game fowls for producing exhibition offspring of good quality is most difficult. Persons who have succeeded in breeding this variety claim that they can be produced only by having separate matings for males and females. To produce males for exhibition they mate a male that is perfect in exhibition qualities with females deficient in breast markings but having an excess of black in their hackles. If the feathers on the head of the female are almost black, such would be preferred for this mating. A male that is laced down into the thighs and along the side beneath the wings, mated to a female lacking in this respect may produce good cockerels. Exhibition pullets may be bred from exhibition females mated to males lacking in breast markings. Such matings are made on the assumption that a defect in marking in one parent may be improved in the offspring if an excessive amount of marking is present on the parent of the opposite sex.

Better results will be obtained in the greater proportion of the offspring from single matings of fowls correct in form and color, and then in turn mating their offspring until a strain has been established that will produce color and markings of a better quality than can come from chance matings in which one fowl has excessive color and the other too little. Many experiments have been made by crossing Duckwing and Birchen Game fowls with Brown-Red Game fowls, and although some desirable exhibition offspring have been produced, the results from them are very uncertain.

To produce Brown-Red Game fowls of a clean, clear black throughout and having lemon-colored markings, only males and females possessing such color and markings in the highest degree should be used. Too much lacing on the throat and breast is apt to appear. To overcome this, males with very little lacing on the breast should be mated with females that are properly marked. Color and markings can be governed through the males, and for this reason males should always have color as nearly perfect as possible, and not too much lacing on their breasts. Marked attention must be given to having the head, shanks, and toes, a bright, clean, clear black.

It is best to follow the rule of color in the English Club Standards when mating for the production of the best color; and, although the American Standard describes combs, face, wattles, and ear lobes as dark purple, the nearer they are to black the better they will appear, and the more certain the fowls will be to produce offspring of the best color.

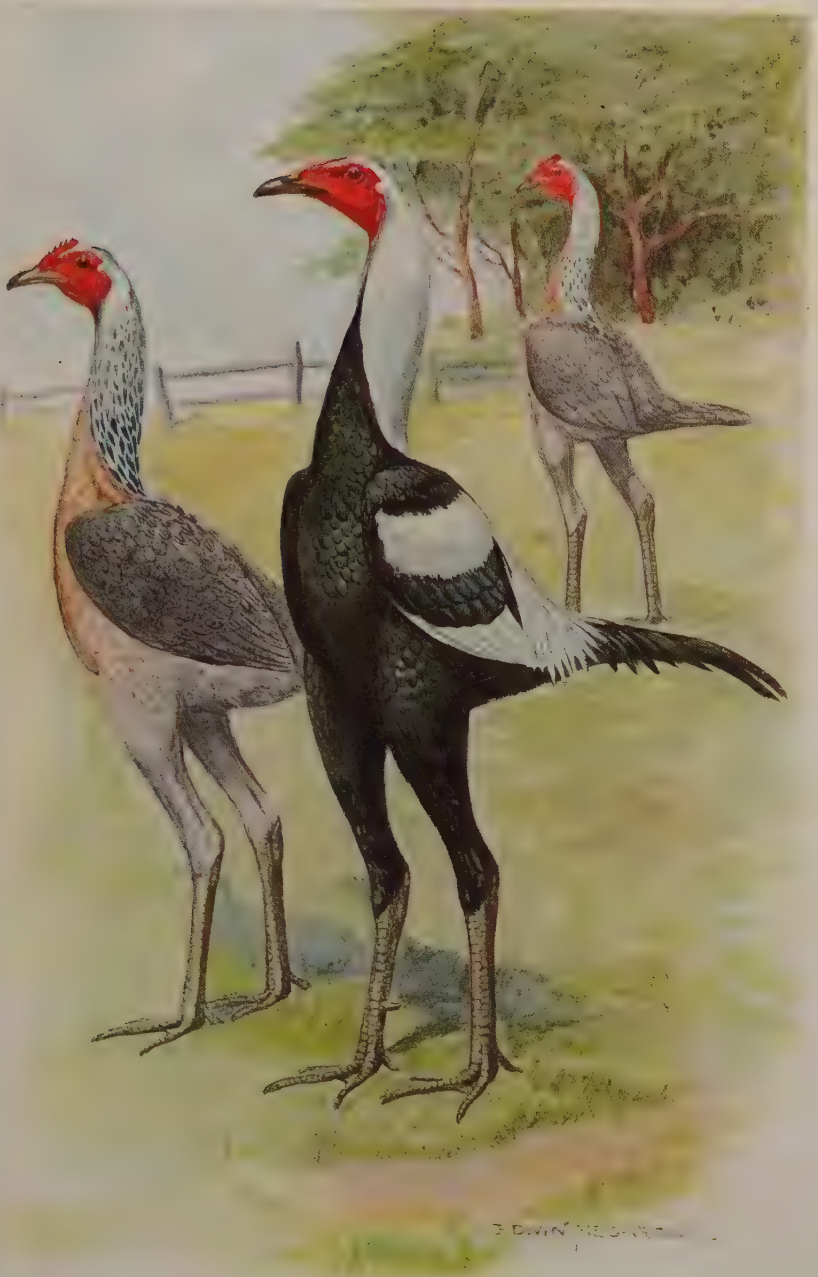
DUCKWING GAME

25. Origin.—The origin of the **Duckwing Game** fowl is the same as the origin of other varieties. They are cross-bred fowls, and, although they are not cross-bred as the term is generally understood, they are game fowls that have come from crossing Black-Breasted Red Game, Duckwing-bred Black-Breasted Red Game, and Duckwing Game fowls. The Silver Duckwing Game fowls were at one time an original race, but as now bred, they are artificial in the extreme, as are also the Golden Duckwing Game fowls. They are so closely allied to the Black-Breasted Red Game fowls as to make them almost one and the same, but in some respects they are quite different.

Duckwing Game fowls are bred in two varieties, the Golden Duckwing and the Silver Duckwing. The Silver Duckwing Game fowls have descended from a well-established strain of the Pit Game type, but, like the Black-Breasted Red Game fowls, they have been subjected to crosses with the Malay fowls. The Golden Duckwing Game fowls have been made through the intermingling of the exhibition types of Black-Breasted Red and the Silver Duckwing Game fowls, the darker specimens of the Silver Duckwing Game being used to soften the golden color of the Golden Duckwing Game fowls for exhibition.

26. Development.—The development of both the Silver Duckwing and the Golden Duckwing Game fowls is described in connection with mating them for the production of exhibition offspring.

27. History.—The history of the Duckwing Game fowls goes back to the general history of the Old-English, or Pit,



Silver Duckwing Games

Game fowls. The history of the modern exhibition Duckwing Game fowls is identical with that of all varieties of exhibition game fowls, except that this variety has been less popular and has received less attention than might have been expected when their beauty is considered.

28. Description of Golden Duckwing Game Fowls. Both the male and the female Golden Duckwing Game fowls have beaks of a dark horn color; the eyes, head, comb, face, wattles, and ear lobes are red; and the shanks and toes are a willow color. The hackle plumage of the male is creamy white and free from striping; the back and saddle, including the wing bows, are orange, ranging from a pale to a rich shade; some persons describe this orange as golden. The finest exhibition fowls usually have wing bows of a rich orange; wing bays, pure white; neck hackle, creamy white; and wing primaries, white on the outer edge and black on the inner edge and tips. When the wing is folded, the white shows more plainly in the wing bays, and above that are black bars, embellished with a glistening sheen. The rest of the body plumage of the male is black; the sickles and coverts of the tail are lustrous black, shading to blue rather than to green. The hackle of the female is white, striped with black; the throat and breast plumage is salmon, shading into gray as it approaches the thighs. The main tail feathers are black; the rest of the body plumage is French, or steel, gray, slightly penciled with black, according to the English Standard; and gray stippled with darker gray, according to the American Standard.

29. Description of Silver Duckwing Game Fowls. The color of head points, eyes, and shanks is the same in the silver as in the golden variety. In fact, about the only difference in the color and markings of these varieties is that the male of the silver variety has white markings, including the hackle, and the female is of a lighter shade of gray. The English fanciers describe the plumage of the female of the golden variety as French, or steel, gray, slightly penciled with black, and of the silver variety as light French gray, with almost invisible black penciling.

The Golden Duckwing Game males have the orange markings that influence a darker shade of plumage in the females of that variety. The intermingling of pure white with the black-red has softened the color of the silver variety, giving the female a most delicately tinted surface color. The distinction between these two varieties is plainly shown in the color illustrations of the Duckwing Game and the Duckwing Game Bantam fowls. In the color illustration of the Duckwing Game fowls, the male is of the silver variety, the female with him is of the golden variety, and the female in the background is of the silver variety.

30. Mating.—Several methods of mating to produce Golden Duckwing and Silver Duckwing Game fowls are practiced by those skilled in the art of producing exhibition game fowls. All of these methods, which are given in the following paragraphs, are necessary for producing and maintaining the several shades of color and markings sought in exhibition fowls.

1. A pure-bred Black-Breasted Red Game male with no trace of markings in hackle or saddle plumage and the less red the better, may be mated with a Duckwing Game female. If a Black-Breasted Red Game male that has clean, clear black where that color exists, the red very mild and verging to an orange shade, with purple rather than green wing bars, can be selected and mated with a Duckwing Game female, it may produce offspring fit for exhibition as Golden Duckwing Game fowls. It may be that only the cockerels from such a mating will answer for exhibition. Pullets so produced can be mated with Duckwing Game males.

2. A Duckwing Game male mated with Duckwing Game females is likely to produce both males and females fit for exhibition. Exhibition fowls of both the golden and the silver varieties may be produced from this kind of mating. This is likely to be true when the male is strong in Golden Duckwing Game coloring and the females range from very dark Golden Duckwing Game coloring to the very lightest tint permissible in the Silver Duckwing Game females.

3. To produce pullets for exhibition, a Duckwing Game male is mated with Duckwing-bred Black-Breasted Red Game females. From such matings pullets of both the golden and the silver varieties will be produced. Any cockerels of either variety that are produced in this way and that are fit for exhibition should be kept not only for exhibition but for breeding with hens strong in the Black-Breasted Red Game blood. The pullets so produced may be mated with either a pure-bred Black-Breasted Red Game or a Golden Duckwing Game male. When such pullets are mated with Golden Duckwing Game males, they are more likely to produce dark-plumaged offspring than when they are mated with a Black-Breasted Red Game male that has light-colored markings.

4. A Silver Duckwing Game male of perfect color and markings mated with Duckwing Game or pure-bred Black-Breasted Red Game females is likely to produce pullets with delicately colored body plumage. The more delicate in color the males and the softer in color the females, the lighter will be the body color of the offspring. The most expert breeders of game fowls claim that more success will come from breeding Golden Duckwing Game males with Golden Duckwing and Silver Duckwing Game females and then selecting and mating the best offspring. To intensify the color, only Black-Breasted Red Game females of the cockerel-bred line should be used.

5. The delicate colors of Duckwing Game fowls are produced by a Black-Breasted Red Game male of a cockerel-breeding strain that has rich, black plumage, clear hackle and saddle feathers, and a good color in the wing bays, mated with Duckwing Game females of excellent type that have coarse or heavy markings and are rusty on the wing bows. All cockerels produced by such matings will be Duckwing Game of both varieties, and most of the pullets will be Black-Breasted Red Game, which will be useful only for breeding with good-colored Duckwing Game males. The Black-Breasted Red Game males used for pullet breeding are much lighter than those used for cockerel breeding, and have but little color on the back and wings. If the Duckwing Game females used have

deep color, or if the pullets from the cockerel matings are used, they must be mated to a pullet-breeding Silver Duckwing Game male.

RED PYLE GAME

31. In conformity with the American Standard, the name **Red Pyle Game** is used here. The English Club Standards call these fowls Pyle Games, and states that they are identical with the Black-Breasted Red Game except that they are red and white instead of red and black.

32. Origin.—Red Pyle Game fowls originally came from crossing the Black-Breasted Red Game and the White Game varieties and selecting and mating the best offspring.

33. Development.—The development of the Red Pyle Game has been gradual and persistent. Formerly all of the fowls had willow-colored shanks and feet, but at the present time only yellow beaks and shanks are permissible. The modern type of Red Pyle Game has been made by careful selection and mating for shape and color.

34. History.—The history of the Red Pyle Game fowls tells of years of persistent work to drive out the black in their plumage, to change it to white, to produce yellow shanks and beaks, and to establish a variety color in the male of pure white and red, and in the female of pure white and salmon.

35. Description.—The Red Pyle Game males have a bright-orange hackle. According to the English Club Standards, the back and saddle plumage is a rich maroon; as described in the American Standard, it is red shading into a light orange. The secondaries of the wings are white on the inner edge and tips, with dark chestnut on the outer edge, which forms rich-colored wing bays when the wings are folded. The rest of the plumage should be pure white. The females have a white body color throughout; the neck hackle is white, tinged with gold; the breast is a rich salmon; the eyes, in both males and females, are bright red; the comb, face, wattles, and ear lobes are red; and the shanks and toes are yellow. Other-

wise true-colored Pyle Game fowls have many or few spots of black scattered through their plumage, and others have so little red in their plumage as to give them, among amateurs, the grade of Lemon, Light, and White Pyle fowls. None of them, however, are worthy of consideration except the rich red and white known as Red Pyle Game.

36. Mating.—Two methods are practiced in mating Red Pyle Game fowls. Breeding by the Standard, as it is called, refers to the mating of males and females both closely approaching the Standard description in size, shape, and color. Whenever the red markings of the offspring lose their brilliancy, Black-Breasted Red Game blood must be bred into them. But so long as good color can be obtained from a single mating of true Red Pyle Game fowls this will be the most satisfactory practice. When this fails, a Black-Breasted Red Game male, perfect in exhibition color, can be mated with Red Pyle Game females. The pullets from such a cross almost invariably have willow-colored shanks, and are likely to have a good breast color. Both the males and the females produced from such a cross may be gradually bred into the strain of the Red Pyle Game; in this way color will be strengthened and maintained.

To produce the most beautifully colored Red Pyle Game cockerels, a Black-Breasted Red Game male with clean, clear, rich color on the back and wing bows should be mated with a Red Pyle Game female or with Red Pyle Game females that have been bred from Black-Breasted Red Game fowls and that have yellow shanks. To produce good males and the finest of females, a Red Pyle Game male that has been bred from a Black-Breasted Red Game male mated with Red Pyle Game females should be mated with good-colored Red Pyle Game females. Both males and females must have yellow beaks, shanks, and toes. Willow-colored shanks will occur frequently from all Red Pyle Game matings, and this must be overcome by using fowls that have rich golden yellow in beak, shanks, and feet. In this variety, the color of the eyes is an indication of the color of the plumage; light-red or cherry-colored eyes indicate a softer shade of plumage than eyes of a darker red.

WHITE GAME

37. Origin.—Whether **White Game** fowls have always existed or whether they came as sports from some of the dark-plumaged varieties or from the Red Pyle Game fowls is not important. The White Game as they now exist, were made by selecting white-plumaged game fowls of unusual size and station and mating and remating them, having in mind exquisite proportions, beautiful plumage, and rich, golden-yellow beaks, shanks, and feet.

38. Development.—The White Game fowls have been bred in such small numbers that they cannot be said to have been developed other than as a novelty for the "any other variety" classes.

39. History.—Other than that they have been bred of a quality acceptable as a Standard variety, the White Game fowls have no history.

40. Description.—White Game fowls have yellow beaks, shanks, and feet; and red eyes, comb, face, wattles, and ear lobes. The plumage should be pure white throughout.

41. Mating.—The rule for mating White Game fowls is to select for breeders both males and females that have as nearly as possible perfect game type, pure white plumage, and shanks and feet of a rich golden yellow. The offspring from such fowls should be mated, selected and remated, care being taken always to select fowls with true game characters and pure white plumage.

WHEATEN GAME

42. In the production of Black-Breasted Red Game fowls for exhibition, female offspring of peculiar color known as a **Wheaten Game** will sometimes be produced. These fowls were formerly considered valuable for the production of males of the highest quality. Of recent years, they have been so little considered that but few of them are kept. One of these females,

Aseel and Cornish Games

known as the Red Wheaten Game, has willow-colored shanks, a golden or a lemon-colored hackle, very slightly striped with black; breast and thighs, a light fawn or cream color; body color and secondaries, a pale cinnamon or wheaten; and a tail, black, except the top feathers, which match the body color. Another offspring from the Black-Breasted Red Game, known as the **Silver Wheaten Game**, has shanks of the same color as the Red Wheaten hen; silvery-white neck hackle, slightly striped with black; breast and thighs, pale fawn or light buff; body color and secondaries, a pale cinnamon; and a tail, black, except the top feathers, which match the body color. The Silver Wheaten Game fowls are used for breeding with males of the Duckwing Game variety.

CORNISH GAME

DARK CORNISH GAME

43. As early as 1820, a breed of fowls known as **Cornish Game** was bred about Devonshire and Cornwall, England. The fowls were bred for fighting more than for any other purpose. They were made by intermingling Malay and Aseel with Pit Game fowls of that locality, selection being made of the Earl Derby type, which had yellow shanks and feet. Later, these fowls were improved for market. Following this, they were developed into exhibition fowls and named *Indian Game*. This name is retained in the English Club Standards. When first admitted to the American Standard they were called *Cornish Indian Game*. In the American Standard of 1910 they are called *Cornish* fowls.

44. Origin.—The origin of the modern type of exhibition Cornish Game fowls was undoubtedly from the best of the Cornish Game, by mating and remating, and then selecting and crossing with the Aseel. Crosses were also made with Malay and other types of game fowls. The claim is made that the originator, Sir Walter Raleigh Gilbert, of England, crossed

a Red Aseel imported from India with English Black-Breasted Red Game fowls of the Lord Derby type. Later, crosses were made with Black Sumatras and with what were known as Pheasant Malay fowls, the last-mentioned cross being made to improve the plumage color in the females. As they now exist, they have originated from selecting and mating the best that could be chosen from the several types that were developed from the numerous early crosses.

45. Development.—The Cornish Game was made in its development. The most expert fanciers of England and America have devoted years to this work. Marked attention was given to amalgamating all their desirable exhibition features into a breed of fowls that combine size, beauty, usefulness, and attractive show qualities. This has been accomplished by a rigid selection for size, shape, color, and markings.

46. History.—The history of Cornish Game fowls begins with the appearance under the name of Indian Game fowls in the show rooms of England about 1870. Aseel Game fowls brought from India and the Black-Breasted Red Game fowls were used for crossing with the best Cornish Games. It has been claimed, but not verified, that the rich markings of both males and females have been intensified by the use of Black Sumatra and Black-Breasted Red Game fowls. Although in the females the narrow pencilings of lustrous black were called for in the back, breast, and body, but few of them had such markings.

47. Description.—A complete description of the Cornish, or Indian, Game fowls is taken from the Welsh United Game Club Standard, which describes the head and neck as rather long and thick; the eyebrows, broad and square, giving a cruel expression; the beak, rather short, stout and well curved; the eyes, full and bold; the pea combs, close fitting; the face, smooth and fine in texture; the ear lobes, small and neat; the wattles, smooth and free from wrinkles; the neck, of medium length and slightly arched; the body, thick set and broad, with prominent shoulder butts; the breast, wide, deep, prominent, and nicely rounded off; the back, fairly flat, gradu-

ally tapering from the shoulders to the tail; the wings, short, muscular, and well tucked up; the tail, of medium length and tight feathered; the secondaries, or coverts, a trifle narrow; the legs and feet, of medium length, strong, and thick; the toes, four in number, long, strong, and straight; the general shape and carriage, upright, commanding, and courageous, with sloping back and tail carried well down at an angle of about 45 degrees. In general appearance they are broad, muscular, active, vigorous, and sprightly.

The plumage of the male is close, narrow, and hard. The females conform in a general way with the males, except that the tail is short and fine, each feather nicely overlapping. The tail is carried well down, but is slightly higher than the tail of the male. The general shape and carriage is upright, commanding, and vigorous, and the back is sloping. The general appearance of the female is broad and muscular, active and sprightly.

Adult males weigh 8 pounds and upwards; adult females weigh 6 pounds and upwards.

The color of the Dark Cornish Game of both sexes is as follows: Beak, horn color or yellow, with a mixture of both; eyes, varying from pale yellow to pale red; comb, face, wattles, and ear lobes, a brilliant red; shanks and toes, a rich yellow or orange color. In the cock, the head is of a rich, glossy, greenish black; the neck hackle, back, saddle hackle, and shoulders, a rich, glossy greenish black, intermingled with rich bay or chestnut; the wing bows, the same mixture of rich, glossy, greenish black with rich bay or chestnut; the wing bars, a rich, glossy, greenish black; the secondaries, a rich bay or chestnut on the outer web and a rich black or green on the inner web and end of feathers, only the rich bay or chestnut showing when the wing is folded, thus forming a triangular patch of wing bay; the primaries, black with a short, narrow fringe of light chestnut color on the outer web; the breast, under body, and thigh plumage, a rich, glossy, greenish black; and the tail, sickles, and coverts, a rich, glossy, greenish black.

In the female, the head is a rich, glossy, greenish black; the neck hackle commences with a rich, dark green, but as the

feathers broaden, the center of the feathers is chestnut color edged with a green border; the breast is a rich bay or chestnut brown, every feather edged with green, and where the size of the breast feathers permits, they should be double laced; the abdomen and thigh feathers are the same, though less distinctly marked; the back, saddle, shoulder, and wing plumage is similar in markings to the breast, only much more distinct, especially on the shoulders and wing bows; the wing bars are heavier in lacing; the secondaries, on the lower or visible web, are a rich bay or chestnut, edged with a narrow strip of green, and the inner web is black; and the tail and tail coverts are a rich bay or chestnut, the ground color being clear and distinctly laced with green.

One English Standard describes the ground color of females as chestnut brown, nut brown, or mahogany brown. It also states that triple lacing, though beautiful, is not desirable and may be due to the influence of Dark Brahma blood. The description of the Cornish fowls in the American Standard conforms in a general way to that of the Indian Game fowls in the English Standard. In the American Standard, the color, which approaches mahogany, is called bay, and pencilings of lustrous black are required to follow the shape of the web of the feather. The eyes are preferred of pearl color in the American Standard, but eyes varying from pale yellow to pale red are admissible in the English Club Standards.

A later color description for females is ground color of a rich bay or chestnut, each feather edged with a rich beetle green; the best fowls have double lacing similar to the markings of the Partridge Cochin. The neck hackle is black at the top, shading into bay, and edged with black; the back and wings are distinctly laced; the wing bows are heavily laced.

48. Mating.—When mating fowls for the production of exhibition Cornish Game fowls, the most nearly perfect form as described must be selected in both males and females. Dependence can be placed in large, well-proportioned females having heavy thighs and strong bone formation in the shanks and feet. Only those fully understanding the proper propor-

tions of a Cornish Game fowl can select breeders from them for producing exhibition fowls. Females lacking in body formation are not likely to produce offspring of much value. When the Malay traits are dominant, offspring of a Malay type are likely to follow; but the breed characters of the Aseel should dominate. The males selected must have the massive body formation peculiar to the Aseel or they will not answer for breeding purposes. The color and markings, although second in importance, must be as described in the Standard; otherwise, there is likely to be a confusion of color in the offspring. The color in well-bred Cornish Game fowls is usually good. Males of good color are likely to come naturally from well-bred stock, but great care and attention must be given to selecting color matings to produce exhibition pullets.

Both sexes can be bred from the same matings, but it is best to use heavily laced hens for the production of males, and those of a lighter ground color and narrower lacing for the production of pullets. This has led to separate matings; some breeders select cockerels with light red on the wing bows and distinct red lacing in hackle and saddle plumage to produce pullets. This line of mating should be about the same that is followed for the production of color in Partridge Cochin fowls; that is, to use the males most distinctly marked with chestnut brown throughout the body plumage for mating with the best penciled females for producing pullets, and the darker males and females for producing cockerels.

WHITE CORNISH GAME

49. Origin.—The White Indian Game, now called the **White Cornish Game,** originated from much the same source as the Dark Cornish. Evidently the fowls were bred by intermingling the blood of the White Malay, the White Aseel, and other white game fowls.

50. Development.—White Cornish Game fowls are of recent development. At first they were almost identical in form with the White Malay fowls, which led to the belief that they came originally from India. Their recent development,

however, has resulted from crosses made with White Aseel, and from selecting the best so produced and breeding them for the mammoth proportions that have been acquired in the dark variety.

51. History.—The history of the White Indian Game, or Cornish, fowls, describes their uncertain existence up to the time of their admission to the American Standard of 1898. Since that time they have been brought to the attention of poultrymen through having been improved in form and general make-up, and because they have been exhibited at some of the largest poultry shows. However, they have not as yet acquired the prominence of the dark variety.

52. Description.—The general outline for breed formation is the same in the White as in the Dark Cornish fowls, the only difference being in plumage color. The Standard demands that the entire plumage, including the quills, shall be pure white. Why so rigid a demand has been made for plumage color is not explained; these fowls do not naturally have plumage so clean and pure as the Wyandottes and some other white-plumaged fowls.

53. Mating.—To improve the quality of the White Cornish Game fowls, marked attention must be given to selecting fowls that possess the body proportions of the Aseel Game fowls. In addition to this, the fowls must have clean, pure, white plumage and yellow shanks and skin. Pearl, or Aseel, eyes are a requirement for these fowls, and should be bred for with care.

WHITE-LACED RED CORNISH GAME

54. A variety of Cornish known as the **White-Laced Red Cornish Game** fowls was admitted to the American Standard of 1910. This variety was originated by W. H. Card, of Manchester, Connecticut.

55. Origin.—Mr. Card states that in forming this new variety he intermingled Shamo-Japanese Game and the Dark Cornish Game fowls and also fowls of a Brahma-Cornish cross.

The females from such crosses were mated to a White Wyandotte male and the best offspring were mated, remated, and inbred to intensify color and markings and to obtain, as far as possible, Cornish Game breed characters.

56. Development.—The development of the White-Laced Red Cornish has been left almost entirely with the originator, who has continued to develop them along the same lines as he followed in making them.

57. History.—The history of the White-Laced Red Cornish Game fowls has been largely given in their origin. They have not been developed with such distinctive Cornish Game breed characters as to stamp them as such at sight. They have been unusually favored by the standard makers, who have not only admitted them as standard fowls but have illustrated them with as much care as the other varieties.

58. Description.—The White-Laced Red Cornish Game fowls should have the same breed characters and body formation as fowls of the other varieties of the Cornish Game, and in color and markings they should be almost identical with the Buff Laced Polish, the main difference being that there is a deeper shade of color in the Cornish than in the Buff Laced Polish. The standard calls for rich, bright-red surface color, with each feather in every section except the tail completely and delicately laced with white; the tail should be white with a red shaft in each feather. Not many of them, however, are produced that have quality equal to this. The eyes, shanks, feet, and beak should be yellow. The body color of both males and females should be a rich, bright red, laced with white; they should have small pea combs of regular formation.

59. Mating.—Only the best White-Laced Red Cornish Game fowls that can be selected should be mated. The breeder should have continually in mind a selection of proper Cornish Game breed characters, with color and markings as described for them.

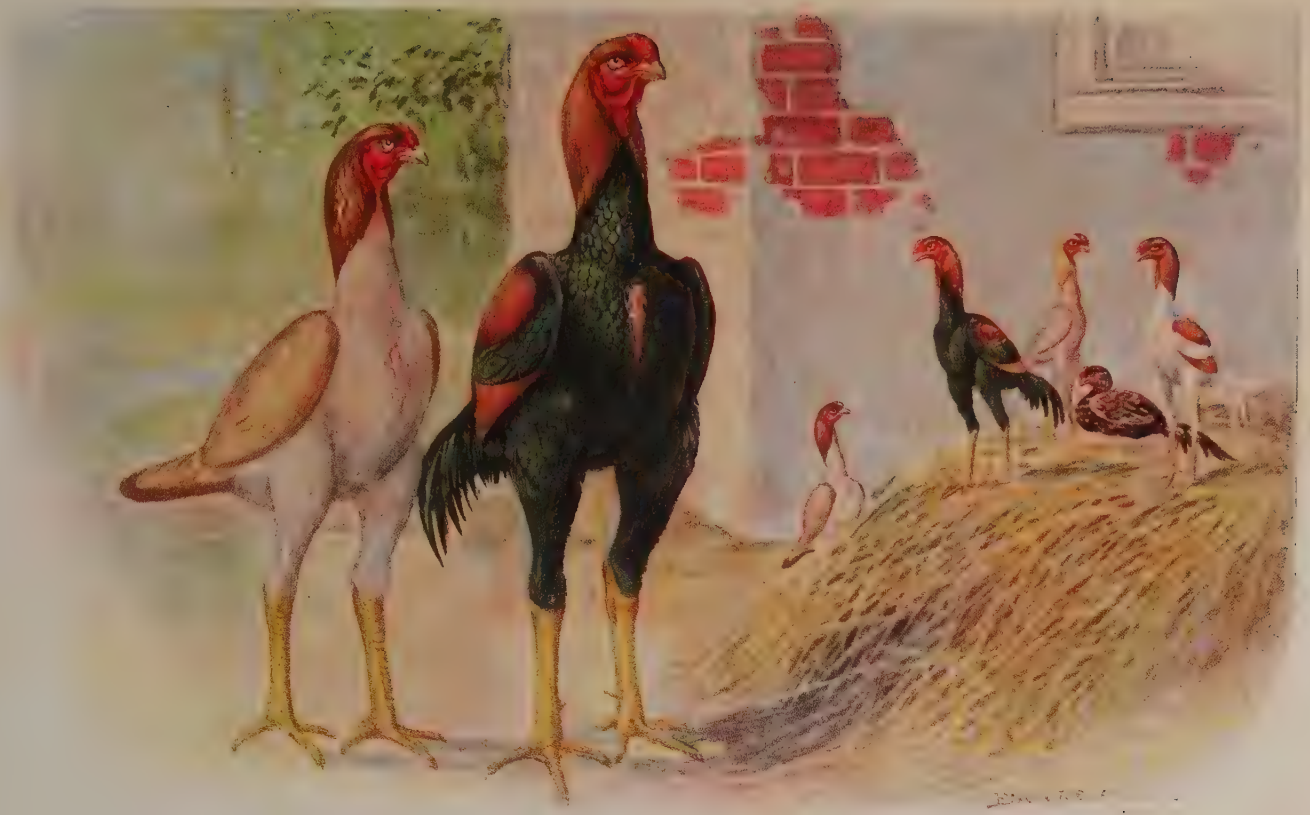
MALAY GAME

60. Origin.—The **Malay Game** fowls are supposed to have descended from the Great Malay, or Kulm, fowls of India, which are supposed to have descended from the Gigantic Cock, previously described. Whether the original Malay, or Kulm, fowl or the Aseel were first will probably never be known.

61. Development.—The fanciers of England have developed the Malay fowls into exhibition Malay Game fowls and, although they are recognized in the American Standard, they are seldom seen in America. The wicked disposition of the Malay fowls has prevented them from becoming popular.

62. History.—The early history of the Malay is uncertain, there being a question as to whether the Malay or the Aseel was first. As a modern breed, the Malay Game fowls have been greatly changed within the last 50 years. They were formerly uneven in color and markings, and the type was different from that of the present. Beginning with 1880, an effort was made, without much success, to advance the Malay Game fowls to a more desirable position as exhibition fowls, but only a few attractive specimens have been seen in recent years.

63. Description.—In carriage, the Malay Game fowls are upright. Prior to the make-up of the modern exhibition game fowls, they were more leggy in formation than any exhibition poultry, but now that the modern exhibition game fowls have been made such long-legged fowls the Malays are considered to have legs of moderate length. The body formation of the Malay Game fowls is compact and heavy; they are strongly built and have great strength in the thighs and shanks. They have the skull formation peculiar to the Asiatic fowls. Overhanging skulls, sunken eyes, yellow shanks, and skin are



all characters of these fowls. Only the Black-Breasted Red Malay variety is recognized in the American Standard. Originally there were many varieties, the most plentiful fowls being those of the Red Malay, the Black-Breasted Red Malay, and the White Malay varieties. The plumage color of the Black-Breasted Red Malay Game fowls is described in the American Standard as much the same as that of the Black-Breasted Red Game fowls, except that the colors are not so well defined. The fowls rarely conform to their color description. This is due to the fact that they have never been bred to any extent for color and that, as now kept, what are known as wheaten colors are bred with them, and variety colors not recognized as standard will appear from such matings.

The English Club Standards for Malay Game fowls describes the color of the eyes as pearl, daw, or yellow; the beak, yellow or horn color; the comb, face, throat, wattles, and ear lobes, brilliant red; and the shanks, rich yellow. In the Black-Breasted Red Game variety, the head and hackle of the males should be a rich, dark red; the wing bars, glossy and greenish black; the secondaries, bright bay on the outer web, and black on the inner web and the ends of the feathers, the bright bay showing when the wing is closed; the primaries, black on the inner web with red edging on the outside; the breast and under parts, glossy black, frequently mixed with reddish brown; and the tail and tail coverts, greenish black.

The body color of females are any shade of cinnamon or wheaten color; the hackle is a dark purplish shade, or partridge marked. The plumage should be free from ticks, spangles, or penciling. More complete information relative to varieties will be found in the discussion of the Malay Bantam fowls.

Standard weights in America for Malay fowls are: Cocks, 9 pounds; cockerels and hens, 7 pounds; pullets, 5 pounds. According to the English Standard, males weigh 11 pounds; females, 9 pounds.

64. Mating.—In mating Malay Game fowls for the production of exhibition fowls, the best that can be obtained should be selected and mated, and the offspring of these mated for

improvement in shape, color, and markings. Those with markings as nearly as possible like the markings of the Black-Breasted Red Game fowls should always be chosen. Both male and female Malay Game fowls, however, are darker in plumage color than the Black-Breasted Red Game fowls, and cinnamon brown occurs frequently throughout the plumage of the female.

BLACK SUMATRA GAME

65. Origin.—Many claims have been made relative to the origin of the **Black Sumatra Game** fowls, none of which is supported by sufficient evidence to establish it as trustworthy. There seems to be no authority for any of the statements relative to their origin except that Black Sumatra Game fowls were brought from the island of Sumatra to America and named for the locality from which they came.

66. Development.—The development of Black Sumatra Game fowls from an unfinished type of fowls into their present beauty of form and feather has been accomplished largely by Nelson A. Wood, of the Smithsonian Institution, of Washington, District of Columbia. Before other fanciers had given any attention to these fowls Mr. Wood had developed them into the present type.

67. History.—The Black Sumatra Game fowls were brought to America from Oriental countries. The actual date of the first importation is not known. Fowls similar to them were mentioned in 1847. About 1885, their development was begun and they were selected and bred until they became such attractive exhibition fowls that others began to breed them; since their development by Mr. Wood, they have been scattered throughout the world. No other fowls will reproduce more true to breed characters than the pure-bred Black Sumatra fowls. A mistake was made some years ago when an attempt was made to improve them by a cross with a black game fowl from India. This injured the quality of all offspring from this cross. The Black Sumatra Game fowls have received marked attention from the English fanciers.

68. Description.—The Black Sumatra Game fowl has a formation peculiar to itself; this is more like the general formation of the Yokohama fowls than like that of fowls of any other breed or variety. The males have long, flowing tails, but not so long as the tail feathering of the Yokohamas; the females also have tails of considerable length. Some of the older females have the uppermost feathers extending beyond the other main tail feathers, with a slight downward curve at the point of the feathers. The plumage of both males and females is a rich, glossy black, glistening with sheen. No other fowl has more brilliancy of plumage than the Black Sumatra. Black Sumatra fowls should have the triple, or pea, comb, but some occur with the lump, or strawberry, comb like the Malay. The eyes are dark. The comb, face, and wattles are described in the Standard as purple, but in some of the best fowls the face, wattles, and ear lobes are dark red; gypsy color in the face and head is preferred in England. The shanks and toes should be black or nearly so; originally, they were dull, or leaden, black, but this has been almost bred out of them; an olive color in the shanks and feet is preferred in England.

69. Mating.—In mating Black Sumatra fowls for the production of exhibition offspring, care must be taken in the selection for head points. The comb should be small, triple in formation, and should fit close to the head; the wattles should be very small in the males and scarcely perceptible in the females; a rich red is preferred to purple in the comb, face, wattles, and ear lobes; the plumage throughout, including the quills and under fluff, should be black, the surface glistening with brilliant sheen; and the shanks and feet should be black, smooth, and shiny. The greater length of tail and tail furnishings the males have the better they will be for producing beautiful offspring. The tails of the females should be long and extended; those that are strong in the male line of breeding show the influence of the sickle in their uppermost tail feathers; those having tail feathers of equal length are considered best for producing females.

NON-STANDARD VARIETIES

ASEEL GAME

70. Origin.—The more the origin of poultry is investigated, the more reason appears for the belief that there was a large original fowl from which the Asiatic breeds have descended. The natural color of the shanks and skin, the head, comb, and body formation of the **Aseel** fowls leads to the conclusion that perhaps they are in the direct line through which all large fowls have descended. In discussing the question of whether the Aseel should be regarded as the ancestor of the Malay type of fowls or whether it has been developed by long and assiduous care in breeding, Lewis Wright states: "The Aseel is of another character, and there can be little doubt that the birds whose battles are alluded to in the Institutes of Menu, 1000 B. C., if not the Aseel as now known, were at least their ancestors." An incident that may be referred to in this connection occurred during the time of Socrates, who was born 469 B. C. and was poisoned about 400 B. C., by order of the judges of Athens. His last words, as reported by Plato were: "Crito, we owe a cock to Esculapius; pay it, therefore, and do not neglect it." Chickens are frequently mentioned by Aristophanes, who lived about that time. The most probable solution is found in the theory that the Aseels were the original game cocks of which mention was made by the early writers, and which have been kept pure and untainted by the princes of India, who valued them for their pugnacious qualities, and who frequently held them up to youths as examples of courage and self-protection.

71. Development.—It can scarcely be said that the Aseel has been developed to any extent. The fowls have been kept and bred for centuries by persons who like to keep

the most pugnacious fowls that could be produced. Since they have come into notice as exhibition fowls, they have been bred only in limited numbers and with more care than formerly. What development has been brought about has been by a few English fanciers.

72. History.—The early history of the Aseel, like that of the Malay, is largely conjecture. Prior to the coming of the Asiatic breeds from their native land, Malay fowls were plentiful in some parts of England. These were largely displaced through the coming of the Brahma and the Cochin fowls. Later, Aseel fowls were brought from India, and the claim was made that until that country was brought under British rule the fowls had been carefully guarded by the people of India to prevent their general distribution. Since that time, Aseels have been distributed in small numbers throughout England and America, and a standard for them has been established by the fanciers of England. When it is remembered that the word Aseel is an Indian, or Hindu, adjective meaning high born or aristocratic, it may readily be seen that the term might originally have been applied to any type of fowl that would meet the requirements of such a description.

73. Description.—The English Club Standards describes the Aseel as follows: General characters of the cock: Head, short and small though broad between the eyes and jaw, and thick at the base; beak very strong, fine grained, and somewhat short; lower mandible, thick and slightly curved; eyes, bold, prominent, and brilliant, set back in the head; comb, triple, or what is termed a pea comb, the smaller the better, very hard and horny; face, fine of texture though hard in substance; ear lobes, as small as possible; no wattles; neck, round, hard, muscular, and powerful, of medium length and uniform width throughout, curved slightly at the back and seated between high shoulders; throat, clean and not prominent or fleshy; breast, wide, short, and flat, carrying no fluff and almost naked at the point of the breastbone; back, broad at the shoulders, short and quite straight; no tendency to roach back; stern, narrow in comparison with the shoulders, but thick and

strong at the root of the tail; wings, strong, short, and carried level, standing well out from the shoulders, often showing a bare spot at the first joint; tail, slightly drooping and short, with narrow, hard feathers; sickles, very fine, hard, and short, tapering like a scimitar to within 3 or 4 inches from the ground—in an old cock the sickles will appear parti-colored, but this is no detriment; coverts, short, spare, very hard, and difficult to break; thighs, thick, strong, and muscular, set well apart, with but little covering; shanks, short but not dumpy, straight and quite clean, with close, regular scales; feet, short, thick, and straight; toe nails, the same; straight hind toe to be preferred, though what is termed duck footed is not a disqualification. The general shape is angular throughout; the general appearance is not too gamy; the carriage is straight and upright; the body is very firm, hard, heavy, and evenly balanced; and the plumage is hard, close, wiry, and devoid of fluff.

The general characters of the hen are the same as those of the male. In color, both sexes are described as having beak and legs to match, though of no definite color. The eyes are pearl, all shades of white, pink, and yellow; the comb, face, jaw, and throat are red. No final standard of color can be given for Aseel fowls, as they are of no fixed hue. The principal colors are red, black, gray, red spangled, black spangled, yellow, and white. Cocks are mentioned as weighing 6 pounds; hens, 5 pounds.

74. Mating.—So little attention has been given to the production of Aseel fowls as to make it impractical to suggest methods of mating, except to state that it is advisable to separate them into variety colors and to mate and select for a variety color that will reproduce its kind. The chief value of Aseel Game fowls to poultry fanciers is in the benefits derived from their use in the upbuilding of breed characters in the Cornish, or Indian, Game fowls.

OLD-ENGLISH GAME

75. Since the beginning of the Roman Empire, a breed of fowls has existed that was formerly bred exclusively for fighting in the pit. From them the modern type of Old-English Game fowls have descended. English writers trace the origin of these fowls not only to the early records of the Chinese, but to the Phenicians as well. Some authorities have expressed the opinion that the Assyrian war god, Nergal, was symbolized by a fighting cock. Whether or not these statements are true is unimportant, but the facts are that the Old-English Game is the nearest approach to a thoroughbred fowl of any known kind. This type of fowl has been carried into every part of the world and has usually closely followed the explorer.

76. Origin.—The Old-English Game fowl is a descendant of the same ancestors as the Aseel, the Malay, and the fighting cock of ancient Rome.

77. Development.—The development of the Old-English Game fowls ceased when the development of the modern type of exhibition game fowls began; they were neglected until about 1890, when a disposition was shown to bring them into prominence for exhibition.

78. History.—The history of the Old-English Game fowls began with their employment for fighting in the pit. This practice has been discontinued by process of law, and the Old-English Game can now be considered only as an exhibition fowl. In England, a standard has been written for them, but their admission to the American Standard has been continually denied. When shown, they are judged by the English Club Standards, but in the show room of America the distinction between variety colors has not been so marked as in England.

79. Description.—The following description of the Old-English Game fowls applies to the varieties accepted as standard by the Game Club of England. In the males, the head is of medium length and tapering; the beak is slightly curved and strong at the base; the eyes are large, bright, prominent, full

of expression, and alike in color; the comb is single, small, upright, of fine texture, and evenly serrated; the face, ear lobes, and wattles are fine and small. It is customary for Old-English Game fowls to be dubbed, as described for exhibition game fowls. The neck should be long and very strong at its juncture with the body, and furnished with long hackle feathers that cover the shoulders; the breast, broad and well developed; the back, short, flat, and tapering to the tail; the shoulders, broad; the wings, long, full, and round; the primary, or flight, feathers, extending well back and amply protecting the thighs; the sickle feathers, abundant; the main tail feathers, broad, curved, with hard, strong, quills, and carried well up, but not of the squirrel type; the thighs, short, thick, and muscular, well set and held wide apart; the shanks, of medium length, finely and evenly scaled, and round, with the spur set low; the toes, four on each foot, long, clean, even, and spreading, the back toe standing well out and flat on the ground; the carriage, bold and sprightly; the movements, quick and graceful; the plumage, hard and glossy.

With the exception that the tail is inclined to fan shape, the general characters of the hen are similar to those of the male, allowing for sexual differences.

The weight of a cock is from 5 to 6 pounds; the weight of hens, from 4 to 5 pounds.

Many variety colors are recognized in the English Club Standards, all of which conform in a general way to the color and markings of all breeds of game fowls and their subvarieties; and, although the colors are not so uniform and distinct or the markings so well divided as in the modern type of exhibition game fowls, there are various colors in them which form beautiful combinations.

Black-plumaged fowls are found in almost every breed. Some of them are rich glossy black and others are dull black. The Standard description for the Black Old-English Game calls for black or very dark color in the beak; the eyes, comb, face, wattles, and ear lobes, red; in some, the comb, face, and wattles are very dark red, approaching purple. The legs are described as round, and the plumage as glossy black throughout.

Another variety called the Brassy-Winged Old-English Game fowls are dark or more usually black, and, with the exception of a little dark lemon color on the shoulders of the cock, they are similar in color and markings to the Black-Breasted Red Old-English Game fowls of the Pit Game type; they are not similar to the exhibition type of Black-Breasted Red Game fowls, which have delicate or lighter shades.

The Silver Duckwing Old-English Game fowls should have beak, shanks, and toes of one color; this is usually blue, olive, white, or yellow. The eyes, comb, face, wattles, and ear lobes should be red; hackle, back, and shoulder of the cocks, silver, free from dark streaks; breast and thighs, black; wing bows, silvery white; wing bars, steel blue; secondaries, white on outer web, and black on inner web, only the white showing when the wing is folded; primaries and ends should be black; tail, black. The hackle of the hen should be silver, striped with black; the breast and thighs, fawn; the back and wings, dark gray; the tail, gray and black.

In the Red Pyle Old-English Game fowls, the beak, shanks, and feet should be white, yellow, or willow; the eyes, comb, face, wattles, and ear lobes, red; the hackle of the cock, orange red or chestnut red; the back and shoulders, deep red; the wing secondaries, bay on the outer web and white on the inner web, only the bay showing when the wing is closed; the rest of the plumage is white. The hackle of the female should be chestnut, with a light shade toward the thighs; the rest of her plumage, white.

In the Black-Breasted Red Old-English Game fowls, the beak, shanks, and toes may be of any sound self-color; the eyes, comb, face, wattles, and ear lobes should be red; the neck hackle and saddle of the males, orange red, free from dark feathers; the back and shoulder coverts, a deep red; the wing bows, deep red; the wing bars, rich, dark blue; the secondaries, bay; the primaries, and wing ends, breast, and under parts, black; the tail, black, with a lustrous green gloss; the neck hackle of the female, golden red, streaked with black; the breast and thighs, shaded salmon color; and the tail, black, shaded with brown.

The Bright, or Ginger-Red, Old-English Game has beak, shanks, and toes of any sound, self-color; the eyes, comb, face, wattles, and ear lobes should be red; neck hackle and saddle of the male, light golden red, free from stripes; back, shoulder, and wing bows, bright red; wing bars, rich, dark blue; secondaries, bay; primaries and wing ends, black; breast and under parts, shaded with brown; tail, black or black shaded with brown; neck hackle of the female, golden red; breast and thighs, light wheaten; back and wings, a darker shade of wheaten than the breast; and tail, black with a shading of brown.

In the Brown-Red Old-English Game, the beak and shanks should be dark, almost black; the eyes, dark; the comb, face, wattles, and ear lobes, dark; the neck hackle in the males, orange red, streaked with black; the back and shoulders, dark red; the wings, dark brown or black; the breast and thighs, brown, or brown marked and shaded with black; the tail, black. The neck hackle of the female is black, striped or shaded golden; the body plumage, black or of a uniform brown mottle; the tail, black.

In the Spangled Old-English Game fowls will be found some of the most beautiful colors and markings known in fowls. The English Game Club Standards states that both males and females have beaks, shanks, and feet colored alike, usually mottled, though self-color, or solid color, is permissible; the eyes should be red or dark colored; the face, comb, wattles, and ear lobes, bright red; the plumage, black, red, blue, or buff, spangled with white, the spangling as even as possible; the tail is usually black and white. Some of the Spangled Old-English Game fowls are marked even more beautifully than the best of the Jubilee Orpington fowls; others are spangled or mottled like the Java, the Ancona, or the Houdan. Almost every kind and character of light and dark markings are admissible in them, provided the intermingling of colors is attractive.

The White Old-English Game fowls are rare and are not usually of a quality equal to the other varieties. In both the males and the females the beak, shanks, and toes should be white or yellow; eyes, red, or pearl; face, comb, wattles, and ear lobes, red; plumage, pure white throughout.

In all varieties of Old-English Game fowls, the shanks and feet of both males and females should be alike in color. The eyes in fowls of the different varieties are of uncertain color; in the White Old-English Game they may be red or pearl; in the Spangled, red or daw, but of whatever color they may be, both eyes in each fowl should be of the same color.

80. Mating.—In mating Old-English Game fowls for exhibition offspring, both males and females must be carefully selected for variety color; in both parents, the eyes, beak, shanks, and toes must be alike in color, and the plumage color and markings correct according to the description for the variety. Game fowls of this type will, if bred in line for a few years, reproduce true to feather.

In mating for the purpose of producing stags for the pit, the safe plan is to have a strain of both males and females that will stand the gaff—the steel spur. No dependence should ever be placed on unknown fowls for this purpose. Known producing females are most highly esteemed.

MEDITERRANEAN FOWLS

ORIGIN, CLASSIFICATION, AND DISTINCTIVE CHARACTERS

1. In the division of races of poultry, Edward Brown classes Leghorns and Anconas as Italian fowls, and considers Andalusians, Spanish, and Minorcas as Spanish fowls. The American Standard includes all these under the head of **Mediterranean fowls.** Mediterranean fowls are among the most generally distributed domestic fowls. These fowls must have existed in their original form in all countries bordering on the Mediterranean Sea, in Greece, Asia Minor, Egypt, Italy, and Spain. They have been generally distributed, and their peculiarities of white ear lobes, lopped combs, and non-sitting proclivity have been stamped on many varieties of fowls derived from them. The Mediterranean breeds and varieties of fowls have the distinctive character of producing white-shelled eggs; they have but little inclination to sit, and have wonderful activity, coupled with great strength and vitality.

Many theories have been advanced as to the cause of the non-sitting proclivity of fowls. During their earliest existence, when the hatching ovens of Egypt and near-by countries were used for incubation and the hens were urged to lay and were not encouraged to hatch their eggs, the instinct, if they had it, may have been bred out of them. From time to time other theories have been advanced. There is no need, however, to discuss this matter further than to say that it has been satisfactorily proved that fowls of any breed or variety can, by selection and care to prevent broodiness, be trained into having but little inclination to hatch their eggs. On the other

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hand, those of almost any breed or variety may be bred and fed into a strong predilection for brooding.

The claim has been made that the Black Spanish was the first of all the Mediterranean fowls to be seen in other countries than Spain. Later investigation has developed evidence that the Spanish fowls as now known were unknown in Spain until taken there from other countries. The primitive Castilian, the Minorca, and the Black Spanish may have been of one origin. The Castilian and the Minorca were as nearly alike in early days as the Leghorns of England and America are at present. The Black Spanish, as originally known in America, were not unlike the existing Black Minorcas. Leghorns and Minorcas are now seen with as much white in the face as was characteristic of the Black Spanish of 1850. Many of the Leghorns of 1870–80 had more red than white in their ear lobes; and as late as 1883, there was considerable controversy as to whether or not white ear lobes should be encouraged in Rose-Comb Brown Leghorns. Although one peculiarity of the Mediterranean fowls is white ear lobes, there is also a tendency in them to show considerable red in the ear lobes as well as white in the face. It is not infrequent for as many as 10 per cent. of the females in a large flock to show a disposition to be broody at some time during the year. This will occur in flocks where Leghorns have been permitted to hatch a brood of chicks only when they have hidden their nests and brought them forth unnoticed.

Leghorn and other Mediterranean fowls will occasionally hatch and rear chicks and mother them until they are almost half grown, but it is scarcely safe to depend on them to continue faithful to a nest of eggs. Even though they may begin with all the appearance of broodiness, they are apt to leave their eggs before the period of incubation has terminated.

No fowl is more precocious than the Leghorn. It is not unusual for Leghorns to begin laying at the age of 4 or $4\frac{1}{2}$ months and to continue to lay after they are 4 years old. Large, well-selected flocks of Leghorns have laid well for three consecutive winters and produced more than enough eggs to pay for their maintenance during the fourth winter. Individual Leghorn

hens have laid more than 500 eggs in three consecutive years, indicating that there are great possibilities in breeding, feeding, and caring for them in a manner that will make them profitable for four laying years. Such tests of their ability at egg production lead to the belief that, by careful breeding, fowls may be produced of a type that will continue to lay well into the third and fourth years. And this may be accomplished in a type of fowls that will rank well as exhibition fowls. Although continual laying is injurious to condition, brothers and sisters of the heaviest layers have often won honors in the exhibition pen, showing to what extent the production of fowls for exhibition, for egg production, and for market may contribute to the profit of those who produce them.

The type of all varieties of Mediterranean fowls differs materially in America, England, and Australia. In America, the Mediterranean fowls, including the Minorca, are more of the Old-English Game type than in other countries. In Australia, a type that is medium between the American and the English types is preferred, and in England all varieties of Leghorn and other Mediterranean fowls are more like the American Minorca. The Minorcas themselves differ materially in England and America. One great difference between the Mediterranean fowls of America and those of England will be found in the comb formation. English fanciers breed for combs much larger than are acceptable in America. Leghorns and Minorcas that have come from England to America are usually condemned for the excessive comb and for bad comb formation. English writers are disposed to class Leghorns and Anconas as Italian fowls and others to class them as Spanish fowls, but here they are taken up and discussed in alphabetical order and classed under the general heading of Mediterranean fowls.

ANCONA

SINGLE-COMB ANCONA

2. The **Single-Comb Ancona** is, in reality, a mottled Leghorn, although the fowls are classed as another breed and are considered as distinct from other Mediterranean fowls, such as the Minorca and Black Spanish. At an early day a type of Leghorn or Italian fowl, called splashed or mottled, that greatly resembled the Ancona of today, was known to be in existence. Like the Mottled Java and similar fowls, these mottled fowls undoubtedly came from the intermingling of black and white varieties in their native land. Years ago it was not uncommon to see some of the Mediterranean fowls with black and white plumage. These occurred in Black Spanish as well as in the Leghorns, and at the present time there is in Scotland a new variety—a broken-colored black and white Leghorn, called the Exchequer Leghorn. This is claimed to be superior to all other Leghorns for egg production, but there is no proof that this is true.

3. Origin.—The Single-Comb Ancona was originally named after the locality in Italy from which it came. The fowls of this breed are said to have been plentiful in the districts of Eastern Italy, about the port of Ancona. When first brought to public notice, the Anconas were irregularly splashed in plumage, and were really splashed Leghorns, or Italians, as they were called, and undoubtedly originated from the promiscuous intermingling of the different varieties of fowls in the portion of Italy whence they came. The claim is also made that they descended from the promiscuous matings of black and of white Minorcas. Their size and general make-up at the present time would indicate, however, that they were of Leghorn, or Italian, rather than of Minorca

Anconas

origin. The modern type of Single-Comb Ancona was developed by the fanciers of England.

English writers are divided in opinion regarding the origin of Anconas, but an examination of the best information obtainable leads to the belief that they have descended largely from Black Leghorns. Of late, Black Leghorns have been used for crossing with the light-colored Anconas to darken the surface plumage.

4. Development.—The Single-Comb Anconas have been developed from the mottled or splashed Italian type of fowls. The color of their shanks and skin would indicate Leghorn rather than Minorca origin. Their early development was carried on almost exclusively by the fanciers of England, only a few of them having been bred in America, for exhibition purposes.

5. History.—Attention was first called to the Single-Comb Anconas about 1880. Prior to that time, mention was made of a type of fowls that would indicate a variety of Italian fowls having mottled black and white plumage. The earlier type was inclined to have shanks of a brighter shade of yellow than the present Anconas. The shanks of these early Anconas were mottled with a dark shade of yellow and with black. Since 1885, importations from Italy into England have been frequent, and a number of Anconas have been brought from England to America. In England a club was formed in their interest, and about 1900 a new standard was made for them. They were admitted to the American Standard of 1898; in the description in this book it was stated that their shape was about the same as that of the Leghorns, and that their plumage color was broken black and white, evenly distributed. A better description of them is embodied in the American and in the English Club Standards of 1910.

6. Description.—The 1910 English Club Standards states that the ground color of the plumage of Single-Comb Anconas should be a beetle green, and that the ends of the feathers should have **V**-shaped white tips; it also states that laced ends on feathers are to be avoided. Formerly, the tail feathers of

Anconas were mostly white, but the tail is now black, tipped with white; the shanks and toes are yellow, mottled with black. The American Standard of 1910 describes Anconas as fowls of Leghorn type, and states that the plumage of the males should be lustrous black, with about one feather in five tipped with white. The V-shaped white tip described in the English Club Standards and the white spangle at the end of every fifth feather described in the American Standard are somewhat similar. The beak, shanks, and toes of Anconas should be yellow, spotted with black; the comb, face, wattles, and eyes should be red; and the ear lobes should be white.

The Anconas are virtually Leghorns, yet there seems to be a determination to change them into fowls more like the Braekels in body formation. This would undoubtedly be of advantage to them. The Campine is the Leghorn of Belgium, and the Braekel is more of a general-purpose fowl of the same country.

7. Mating.—The latest directions for mating Single-Comb Anconas according to the English method state that fowls having Leghorn breed characters should be selected. To meet the Standard requirements in England, the Leghorn fowls must have a heavier body formation than is approved in America. In addition to this heavy body formation, Anconas for mating should have body plumage of a lustrous black, with a rich beetle-green sheen to it; the under plumage should be dark; all the white in the feathers should be confined to the tip, and the ear lobes should be as white as it is possible to have them; the eyes should be brilliant in color; the shanks and toes should be yellow, marked with dark or black spots; the beak should be horn color or yellow, marked with a darker color. Strict attention should be given to the selection of fowls having fairly good size and a perfect development of V-shaped white tips on the feathers. Lacing or spangling like that found on a Hamburg on the ends of the feathers or in any part of the plumage should be avoided. The darker the breeding fowls are in under plumage, the greater will be the chances of producing a rich, lustrous, black surface color in their offspring.

Anconas are difficult to produce in perfection, yet this difficulty has attracted fanciers to them. Anconas have not received as much attention in America as in England. The fanciers of America have recently seen the need of greater perfection in them and have declared against the spangled plumage as described in the Standard of 1910, and in favor of the **V**-shaped markings, which are proper. To breed them correctly, parent fowls must be very dark in plumage, with a rich, brilliant sheen on the surface plumage; they must have dark under plumage and distinct white markings of correct shape at the ends of the feathers. Even from matings of the best fowls obtainable, many of the offspring will be much too light for exhibition. To intensify the color and increase the amount of black, Anconas must be crossed with Black Leghorns. When this is done, the English type of Black Leghorns should be used to increase the size.

ROSE-COMB ANCONA

8. Origin.—The **Rose-Comb Ancona** is said to have originated from the Single-Comb Ancona, by crosses with Silver Hamburg and Silver Laced Wyandotte fowls. There is no authentic record of their origin.

9. Development.—The Rose-Comb Ancona was originated in England and developed by a few fanciers who had keen interest in the improvement of the fowls.

10. History.—The Ancona Club of England recognizes the Rose-Comb as well as the Single-Comb Ancona, and both have been admitted to their Standard. The Rose-Comb Ancona has not been admitted to the American Standard. Fowls of this variety do not now possess quality equal to those of the single-comb variety.

11. Description.—In size, shape, and color the Rose-Comb Ancona conforms to the Single-Comb Ancona, the only difference being that the former has a rose comb of medium size, low and square in front, and tapering to a point in the rear, the heel of the comb following the shape of the head.

12. Mating.—Fowls for mating for the production of the Rose-Comb Ancona should be the same kind, comb excepted, as for the Single-Comb Ancona. From the fact that there are not many Rose-Comb Anconas of good quality, the best that can be selected must be used, and the best offspring selected and mated until breed characters, color, markings, and comb have been perfected.

ANDALUSIAN

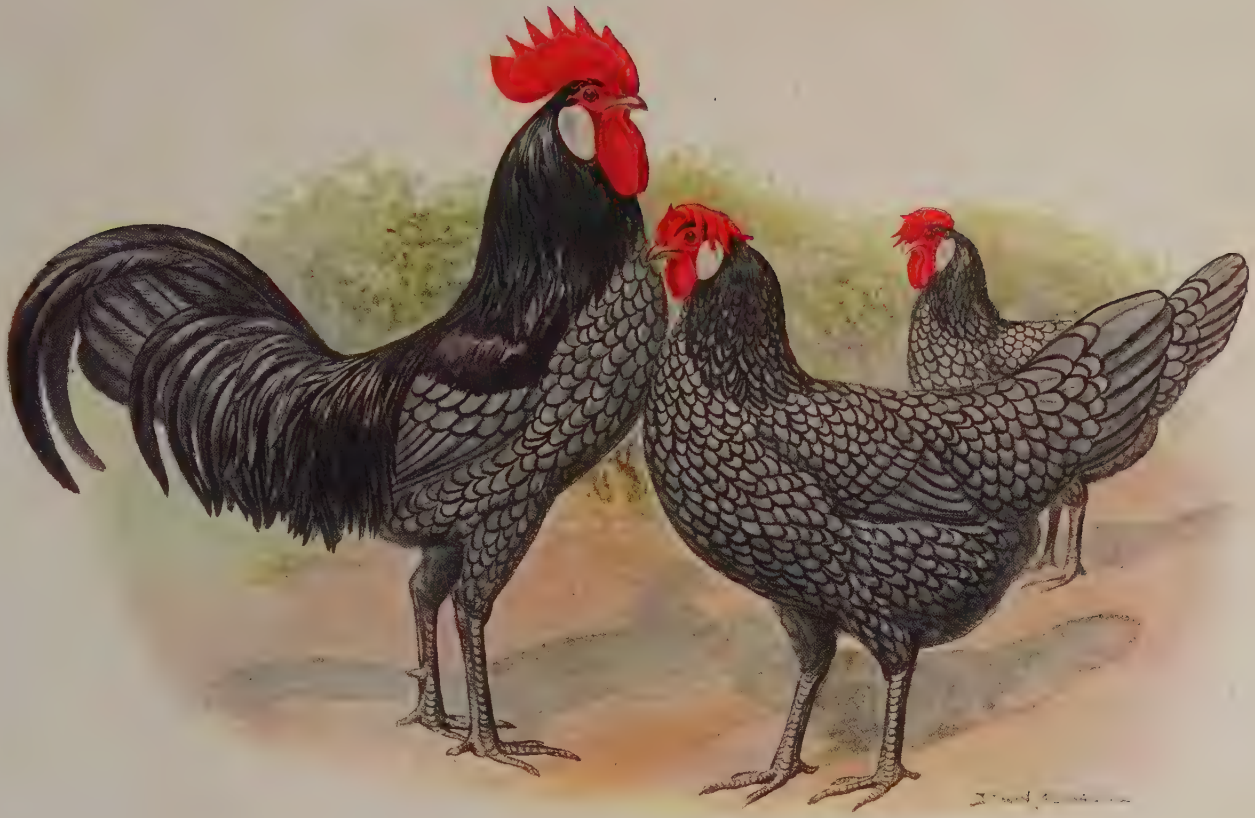
13. The **Andalusian** is one of the oldest of the Mediterranean breeds of fowls. Andalusians are mentioned in the earliest classifications of poultry. They are larger than fowls of any of the other Mediterranean breeds, the Spanish and the Minorca excepted.

14. Origin.—The Andalusians of the present were made by the fanciers of England, and the fowls from which they have been developed came from the Mediterranean region. Undoubtedly they have resulted from the promiscuous intermingling of white and of black fowls in their native lands, and the best were selected and bred until they were brought to their present state of perfection.

15. Development.—Poultry fanciers all over the world have taken part in the development of the Andalusians. They were brought from England to America and have been more or less cultivated by the fanciers of the United States and Canada. In their development, special attention has been given to large size, to breed characters, and to beautiful plumage color.

16. History.—The Rev. E. S. Dixon, M. A., wrote of them in early days as follows: "Some of the birds are of a blue or gray or slaty color. Their growth is so rapid and their eventual size is so great that they are remarkably slow in obtaining their feathers. Although well covered with down when first hatched, they look almost naked when half grown and should therefore be hatched early in the spring."

Moubray's treatise on "Domestic and Ornamental Poultry" states: "No other of the Spanish family has a better title than



ANDALUSIANS

the Andalusians to be viewed as a distinct subvariety. The name has of late been applied to the recently imported Gray and Spangled Spanish. It is proposed, however, to confine it to a perfectly black subvariety, long known in this country, which has been imported from the same district of Andalusia as the Grays."

The same writer states that the appellation of Ancona is also frequently applied to fowls of the Andalusian and Minorca subvarieties, and he questions the right of appropriating the name Andalusian to other fowls than those to which it originally belonged. Later, Martin Doyle stated that "the Andalusian is unquestionably a cross of the Gray Manx, which is now rarely seen." He goes further and states that the Manx was the original domesticated species in Spain.

Later writers state that the Andalusians were originally called Blue Spanish, and that they were of a blue or dove color, some of them having fairly good black lacing. From the information that can be gathered, and viewing them in comparison with the early Spanish fowls, which have but little more white about the head than is now seen in the Minorca, it is fair to assume that the Andalusian, the Spanish, and the Minorca were derived from the same source. It is thought that Andalusian fowls were first brought to England in 1851, and were known by the various names of Blue Spanish, Blue Minorca, and Andalusian, and that all of them were fashioned after the game fowl, some claiming that they were a blue variety of game fowls. Notwithstanding this statement, they are mentioned prior to 1850 by the Rev. Dixon.

17. Description.—The Andalusians differ materially from the Leghorns in shape, being more like the Spanish in form and breed characters than fowls of any of the other Mediterranean breeds. The comb, face, wattles, and eyes are red; the beak is dark; the shanks and toes are of a bluish tinge—the more distinctive the blue, the more desirable are the fowls; the top color of the males, including sickles and tail coverts, is a rich black, overcast with a bluish tinge; the rest of the plumage is silvery blue, as described in the English Club Stand-

ards, and slaty blue as described in the American Standard; the feathers are edged or laced with a darker shade, approaching black. The head and hackle of the female is bluish black, gradually lightening into a bluish slate color about the neck; the body plumage is described in the American Standard as slaty blue, and in the English Standard as silvery blue laced with a darker shade, approaching black. The main tail feathers and the secondaries are greatly improved if laced about the ends with the darker shade of color. White in the face, rusty color in the plumage, and bad-colored shanks are serious defects.

The Standard weights for Andalusians are: Cocks, 6 pounds; cockerels and hens, 5 pounds; pullets, 4 pounds. The English Standard calls for from 7 to 8 pounds in males and from 5 to 6 pounds in females.

18. Mating.—The most discouraging feature of breeding blue fowls is the tendency natural to them not only to produce many badly marked offspring but many that are marked with white. This has been overcome to some extent by encouraging in the show room a darker shade of top color in the males and dark hackles in the females. Formerly, it was not unusual for more than half the offspring to be splashed with white. Some strains at the present time will produce offspring 50 per cent. of which will be fit for breeding and exhibition purposes and more than half the rest will have fairly good plumage color. Such fowls, however, can be produced only from those that have been bred in line from a selection of the best each year. To overcome the tendency to lose color, the males used in the matings should be heavily laced with dark blue or black about the edges of the feathers of the breast and body. Some of the hens that are selected for the matings may be light silvery blue, laced with dark blue; others in the same matings should be darker; all should be true in color and markings, with no trace of white or gray in their plumage. It has taken years of careful breeding to have the Andalusian fowls so nearly perfect. Constant watchfulness and care must be practiced to improve their quality and to keep them equal to what they now are.

LEGHORN

ORIGIN AND HISTORY

19. Italy was undoubtedly the home of the original **Leghorn** fowls. Early literature shows that poultry of several kinds was bred at least 3,000 years ago, and the records state that fowls were used for food by the Romans 2,000 years ago. The earliest detailed description of them indicates that there were fowls with five toes and some with fewer, and of various shades of plumage. According to some of the earliest records, game fowls were known to exist, and it is natural to suppose that their existence was known to the Romans and to their ancestors. They were no doubt distributed throughout the Roman Empire, and from such an ancestry the many plumage colors of the Leghorn fowls can be traced.

Leghorns, as they now exist, were developed by the poultrymen of the United States. Fowls of various kinds were purchased from sailing vessels that came from Spanish countries to American ports. At that period, supplies of fresh meat were carried alive, and poultry was most convenient for this purpose. The captains of ships landing with a surplus stock of fowls were willing to dispose of them and take on a new supply that would be better able to stand the strain of the return trip, and in this way Leghorns were brought to the United States.

There has been a great deal of contention as to which was the original variety of Leghorn and which was first brought to America. Personal investigation by an officer of the United States Navy furnishes the information that about 1815 Leghorn fowls were of all kinds of colors of the game fowls and were all more or less alike in shape. This investigation was made in response to a request to learn the variety colors of poultry exposed for sale in the Mediterranean ports.

This would indicate that the Leghorn fowls, as they existed in Italy prior to 1815, were a mongrel lot and that they had come from the promiscuous breeding of all kinds and colors of fowls that conformed to a single type. They had the peculiarity of white ear lobes and the production of white-shelled eggs. Martin Doyle, one of the earliest writers on poultry, refers to a fowl, which he calls Manx, as the original Spanish fowl. Some writers claim that black, some that brown, and others that white Leghorns were the first to be brought to America. Some allege that there were no black fowls resembling Leghorns in the Spanish countries in early days. All such claims seem to rest entirely on individual investigation. There does not seem to be any doubt that wherever white fowls have existed, there were black fowls of the same character, and that wherever black fowls existed, white ones of the same kind were almost certain to be present. Undoubtedly, the foundation blood of the White, the Black, and the Brown Leghorn fowls was early brought to America. It has been fairly well established that the Rose-Comb Leghorn did not exist in the Spanish or Italian countries, and it has also been stated that the Brown Leghorns were not a natural product of Mediterranean districts. It can scarcely be questioned, however, that among the poultry natural to the Mediterranean districts there were fowls of the Leghorn type, from which all the varieties have been originated by selecting and mating for a purpose.

BLACK LEGHORN

SINGLE-COMB BLACK LEGHORN

20. Origin.—As all Leghorn fowls originated from the one source, it is unnecessary to repeat the origin of the **Black Leghorn.**

21. Development.—Black Leghorn fowls have not gained as much favor in America as in other countries, but little attention having been given to their development. English fanciers have done most for their improvement.

22. History.—It is now generally admitted that White, Brown, and Black Leghorn fowls were brought direct from Italy to America, and were first developed in the United States. Black-plumaged fowls never having been favorites in America, the Black Leghorn fared badly, and, although the variety was included in the first authorized Standard of the American Poultry Association, the fowls never became popular. Their shanks and toes were originally described as being yellowish black. This same description is maintained in the present American Standard of Perfection. The English Standard states that shanks and feet shall be yellow or orange, with yellow toe nails.

A rose-comb variety of Black Leghorn is recognized by the English Standard, all requirements except the comb being the same as for the single-comb variety. In writing of them in his "Poultry Manual," the Rev. T. W. Sturges, M. A., of England, states that the Black Leghorns are of pure Italian blood; that they have long been bred not only in Italy, but in Germany, Switzerland, and Belgium, and that some of the best that have come into England have been brought from Belgium. The Black Minorca has been bred into the Black Leghorn to increase the size. The Single-Comb Black Leghorn has become popular in England during recent years, although it has gained but little favor in America.

23. Description.—All Leghorns should conform in a general way to one shape, which is portrayed in the color illustration. Notwithstanding this, a slight difference does exist in the general formation of some of the varieties. Fowls of the white variety have been bred in the highest state of perfection, or nearest to the Standard description. Those of the brown variety diverge a little from this description; the Duckwing, or, as it is now called, the Silver Leghorn, conforms less to this Standard description than the Leghorn of any other variety. A general description of shape is given in the discussion of the white variety.

Comb, face, wattles, and eyes are red; the beak, shanks, and toes are yellow, or yellowish black; the ear lobes are white; the surface plumage throughout must be glistening black in this

variety—the more sheen on the surface plumage, especially in the males, the more beautiful they will be. The under plumage should be very dark or black; white or other foreign colors are not permissible in any part of the plumage.

24. Mating.—In mating Black Leghorn fowls for the production of exhibition specimens, those having perfect Leghorn type and black plumage glistening with sheen are likely to produce offspring having the richest plumage color. Red may appear in the hackle and saddle of some of the males produced from such fowls, but otherwise, good color in the surface and under plumage should prevail. The main difficulties to be avoided are pinched tails in the females, tails carried too high in the males, and too much dark color on the shanks and toes. It is less difficult to produce yellowish-black shanks in males than in females. Some breeders have introduced Black Leghorns with yellow shanks from England to improve the color of shanks.

ROSE-COMB BLACK LEGHORN

25. Rose-Comb Black Leghorn fowls of beautiful form and color have been produced by crossings of the Single-Comb Black Leghorn with the Black Hamburg. The offspring from these matings have been selected and mated, and this process continued until a variety of Rose-Comb Black Leghorn has been produced that is fully the equal, and, in many instances, the superior of other rose-comb varieties. To improve the shank and toe color, Rose-Comb White Leghorn females have been bred with the Rose-Comb Black Leghorn males.

The only development that the Rose-Comb Black Leghorn has received has been along the lines mentioned, and the history of these fowls tells only of a few fanciers who have paid attention to their development for beauty and finish from a fancier's standpoint.

The description of the Rose-Comb Black Leghorn is the same as that of the Single-Comb Black Leghorn, the only difference being in the shape of the comb.

The fowls selected for mating for the production of exhibition fowls should be of the same form, with the exception of

Brown Leghorns

the comb, and of the same color as the single-comb variety. Special attention should be given to the comb, ear lobes, and the color of the shanks and toes.

BROWN LEGHORN

SINGLE-COMB BROWN LEGHORN

26. Origin.—Like the other varieties, the **Single-Comb Brown Leghorn** originated in Italy. The fowls of this variety have been developed to their present state of perfection in the United States from the crude fowls brought from their native land. Their origin is more fully explained in connection with their history.

27. Development.—The Brown Leghorn fowls were largely developed by A. M. Halsted, of Rye, New York, who produced the best that were known prior to 1870. Since that time they have been improved year after year by a number of fanciers in many parts of the United States. As bred in England, they are so different in general characters from those bred in the United States as to appear like fowls of another breed.

28. History.—It is generally admitted that the first Brown Leghorns were brought into Massachusetts between 1850 and 1853. The first authentic record of their appearance as a distinct variety is credited to F. J. Kinney, of Worcester, Massachusetts, who secured them from a ship in Boston harbor in the spring of 1853. Following this, he had some brought direct from the city of Leghorn, in Italy; these he described as being "not brown-red games, nor black-red Leghorns, but brown-red, the cocks being dark brown spotted with lighter brown." The hens were colored much like the cocks. This described the former color of the Brown-Red Game, to which the early Brown Leghorn conformed. It has been claimed but not proved, that Leghorns were brought into the ports of New England as early as 1833. This is undoubtedly true,

but there does not seem to be any satisfactory proof that the Brown Leghorn was known as such in the United States prior to the record made by Mr. Kinney.

29. Description.—The Brown Leghorn for exhibition should conform to the shape description of all Leghorns. They do not, however, have shanks as long as the white variety. Both the males and the females are usually larger than the fowls of the other varieties, and the tail carriage of the males differs from that of the white variety. The male in the color illustration of Brown Leghorns is a portrait of the best male shown in 1910, and the female is a composite portrait of the three best females shown during the same year. The color and markings have been made as nearly like the original as possible. Body formation, comb, and general make-up are copied from life.

The top color of the Brown Leghorn male is red; the hackle and saddle are striped with black; the red should be as rich and brilliant as possible, the black stripe having the appearance of having been laid on top of the red. The breast and body color of the male is glossy black; the tail throughout is a rich, glossy black, burnished with a greenish sheen; the shanks and toes in both males and females are yellow or dusky yellow. The plumage of the female is light brown, stippled with a darker shade; the breast feathers are salmon, shading lighter as they approach the thighs. The beauty of the female depends largely on one even shade in the plumage, the lighter shade predominating, with no reddish tinge. The face, comb, wattles, and eyes in both males and females are red; the ear lobes are white, and the color of the under plumage is dark.

Brown Leghorns are bred in both single- and rose-comb varieties, the only difference being in the style of comb. Those of the single-comb variety have a beautifully formed comb that stands erect on the male and droops on the female. The comb of those of the rose-comb variety conforms in general make-up to the comb of the Hamburg, but is usually not so large, and shows more tendency to follow the shape of the head. Size, shape, color, and markings are the same in both varieties.

The rose-comb variety is a made variety and will be mentioned more fully in the discussion of the White Leghorn.

30. Mating.—Two methods of mating are necessary for the production of the best Brown Leghorns of both sexes. For the production of a flock of even color and attractive appearance, single, or standard, matings may be practiced, though but few fowls fit for the keenest competition can be produced in this way. For this reason, it is best, where but one flock is kept, to have this of the pullet-breeding line, and to be satisfied with the production of beautiful pullets and such males as will naturally come from them.

To produce a flock of fairly good males and females of an even color by single mating, it is necessary to select females of good form and color, and to mate them with males that have little or no striping in the saddle and not much striping in the hackle. From such matings, fowls of medium quality will be produced. When the offspring from such matings are too dark, males selected from a well-established pullet-breeding line should be introduced into the flock.

When Brown Leghorn fowls are bred for utility purposes, they should be selected from the female line and bred for the production of female offspring with the beautiful plumage color of the standard-bred female and without regard for the color and markings of the male. In this way females of uniform color and show quality will be produced, and the pullets will also be great egg producers and satisfactory as market poultry. Only males bred in line from beautiful females should be used in such matings, and neither males nor females from cockerel-breeding strains should be introduced into such a flock.

The double mating system is practiced with Brown Leghorns to overcome the differences in color, shape, and comb between the sexes. Color is the main difficulty and needs the most attention. The exhibition males must have deep, rich, red plumage, with intense hackle and saddle stripings; the breast and fluff must be free from brown. Rich red males are required to produce such males. Males for breeders should have (but usually lack) brilliancy. Purple in any part of the plumage

is highly objectionable. Other bad colors common to Brown Leghorn males are found in the hackle, which will often show several shades lighter than the back and saddle plumage; or the black stripe in the hackle will run out at the tip and not be completely encircled with red edging. When the black striping runs out at the tip of the hackle feathers, there is a smutty appearance, or a circle of black, at the end of the hackle. The points of all feathers that have striping should be edged with red, and no striping should run out to the edge of a feather. The top plumage of the male should be an even shade of rich, brilliant red, striped with black, and have a brilliant, greenish sheen. The breast and body plumage and wing bars should be a rich, glossy black; the shanks and toes should be yellow.

Such males should be mated to females that have come from the same line of breeding. They should have heavily striped hackles edged with red, and a green sheen over the back and wings. This point should be more carefully looked after than is usual. Females that have a dark partridge color on the body plumage should not be discarded even though their breasts are almost black. Records should be kept of the males produced from each hen, and all hens that do not produce cockerels of the most satisfactory exhibition quality should be discarded, and only hens and their offspring that produce well should be continued in the flock. No males or females from the pullet-breeding line should ever be introduced into a strain of fowls bred exclusively for the production of exhibition males.

In the pullet-breeding line, only males that have been bred in line for three generations from the finest exhibition females should be used. Such males mated to females perfect in exhibition form and color will be almost certain to establish a line of breeding fowls that will produce, almost to a certainty, a number of females that are quite alike and fit for exhibition. Males bred from such matings are the only kind that will be fit for use in mating for the production of females. No matter what the color and markings of such males may be, if they have been bred in line for three generations from a strain that produces exhibition pullets, they are best for this purpose.

To avoid the dangers of too much inbreeding, two of the finest exhibition hens should be selected each year, and from their offspring the cockerels should be selected for the next year's matings. Other hens should be selected for the same purpose the following years. For the introduction of new blood into a flock of this kind, the finest females from another pullet-breeding strain should be selected and mated to a cockerel from the best hen in the fancier's flock. If this mating produces pullets of superior exhibition qualities, pullets from this line may be mated to the fancier's own best males, and if these pullets continue to produce females of superior quality, cockerels from this line may be sparingly introduced into the flock.

In breeding for the production of exhibition Brown Leghorns, only fowls that conform to the shape described for the Leghorn breed and to all the color requirements of the variety should be selected for each mating.

ROSE-COMB BROWN LEGHORN

31. Origin.—There was formerly a great deal of controversy over the origin of the **Rose-Comb Brown Leghorn.** Y. C. McDaniel, of South Hollis, Maine, who was perhaps the first to breed fowls of this variety, has never given an account of their origin. Fred Ayres, of Connecticut, went to Italy in search of Leghorns, but failed to find the rose-comb varieties. It is probable that they, like all rose-comb varieties, resulted from crossing the single-comb fowls with Hamburgs, presumably the golden variety.

32. Development.—In the development of the Rose-Comb Brown Leghorns, a number of crosses have been made. Golden Laced Wyandottes were crossed with Brown Leghorns, but this resulted in destroying beauty of the comb and body formation, and the strains so produced laid eggs with tinted shells. The best Rose-Comb Brown Leghorn fowls have been made by carefully selecting the breeders for breed characters of comb and color.

33. History.—The history of the Rose-Comb Brown Leghorn is about the same as that of all other Leghorns having rose combs. At first they had bad color and faulty comb formation, but of late many have been produced that fully equal those of the single-comb variety in breed characters. As early as 1903, a pen of Rose-Comb Brown Leghorn fowls was sent from America to Australia, by Mrs. Hansel, to compete in an annual egg-laying contest, and they did remarkably well.

34. Description.—The Rose-Comb Brown Leghorn must conform in size, shape, and color to that of the single-comb variety, and, in addition, must have a beautifully formed rose comb of the Hamburg type.

35. Mating.—Rose-Comb Brown Leghorn fowls for breeding purposes must be selected for size, shape, and color, as demanded for those of the single-comb variety. More than usual care must be given to selecting for comb formation, ear lobes, and plumage color. The fowls of the rose-comb variety must be considerably improved in all these features before they will equal the best of the single-comb variety. This can be accomplished if as much care is given to them as was given to those of the single-comb variety.

BUFF LEGHORN

SINGLE-COMB BUFF LEGHORN

36. Origin.—The **Buff Leghorn** first existed in Italy and was taken from there to Denmark. The origin and development of the Buff Leghorn is more fully explained in its history.

37. Development.—The development of the Single-Comb Buff Leghorn that was accomplished prior to 1888 was made in Denmark and, although this development did not bring the fowls in line with those of other varieties of that period, it separated them into a variety that attracted the attention of the poultrymen of England.

Rose-Comb Buff Leghorns

38. History.—For some unknown reason the yellow Italian fowls were first taken from Italy to Denmark, where they were bred for market poultry. When first taken into England they were much darker than they should be. They have been known both as Chamois and as Yellow Leghorns. They were bred and selected in England until fairly good buff-colored fowls of the Leghorn type were produced. When first brought to America, they were of bad form and irregular in the color of their shanks, and their plumage was badly marked with white and black. By careful breeding and selecting they are now of true Leghorn type, and many of them are golden buff throughout.

39. Description.—The Buff Leghorns are of two varieties, the single-comb and the rose-comb, the only difference in the fowls of the two varieties being in the style of comb. Both are of the type demanded for all Leghorns. Special features to be desired in Buff Leghorns are yellow shanks and beak and perfect plumage color. They have always been deficient in these requirements, and also in the color of the ear lobes. The color illustration of the Rose-Comb Buff Leghorns shows the type and color that is most desirable.

40. Mating.—In mating Buff Leghorns for the production of exhibition fowls, marked attention must be given to the careful selection of fowls that have the proper breed characters, true golden-buff plumage, and shanks of a rich, golden yellow. In mating for color, the same rules must be applied that are necessary for producing the best color of plumage, as described for the mating of Buff Cochins. Neither black nor white should exist in any part of the plumage of the fowls selected for the matings. Marked attention must be given to the selection of properly shaped combs. The main difficulties to be overcome are defective combs, uneven and improperly colored ear lobes, and deficiency in the color of the plumage and shanks.

ROSE-COMB BUFF LEGHORN

41. Origin.—All varieties of Leghorns having rose combs have been produced in about the same manner. In some instances they were produced by crossing Rose-Comb White Leghorns with Single-Comb Buff Leghorns, and by crossing Single-Comb Buff Leghorns with both White and Golden Hamburgs. Desirable **Rose-Comb Buff Leghorns** were then secured by selecting the best of the offspring from these crosses and breeding from them.

42. Development.—The Rose-Comb Buff Leghorn has been largely developed by the fanciers of America, and although the fowls are not equal in quality to the Single-Comb Leghorns, if carefully selected and bred, they will be made as beautiful as any of the Leghorn family.

43. History.—The history of the Rose-Comb Buff Leghorn is coincident with that of the Single-Comb Buff Leghorn.

44. Description.—Rose-Comb Buff Leghorns must conform to the Single-Comb Leghorns in every way except in the comb, which must equal in quality the rose comb of any of the Leghorn varieties.

45. Mating.—The same general methods of mating must be applied in mating Rose-Comb Buff Leghorn fowls as are necessary for success in the case of the Single-Comb Buff Leghorns. Unusual attention, however, must be given to selection for combs and ear lobes. These are the weak points in fowls of this variety, and if a breeder is to be successful, they must be watched and improved by careful selection.

SILVER LEGHORN

46. Since 1894 a variety of Leghorn, now known as the **Silver Leghorn,** has been described in the American Standard as the *Silver Duckwing Leghorn.* This variety has also been commonly called *Duckwing Leghorn* and *Golden Duckwing Leghorn.* In the revision of the American Standard of 1910

the name was changed to Silver Leghorn. Only one variety is recognized by the American Standard, but the English Standard recognizes two varieties, the Silver Duckwing Leghorn and the Golden Duckwing Leghorn.

47. Origin.—The Silver Leghorn is said to have been originated by G. Payne, of England. It has been stated that this variety was made by crossing Leghorns with the Yokohama, or Japanese, game fowls having the same colors as the Silver Duckwing. Other crosses have been made with Leghorns and Silver-Gray Dorkings, and with Leghorns and Silver Duckwing Games. Mr. Payne was also the originator of the Pyle Leghorn, and both varieties were in process of development at the same time.

48. Development.—The Silver Leghorn was developed largely by Mr. Payne and Mr. Terrot, of England. For a long time the fowls lacked Leghorn breed characters, but their defects have been greatly improved, and good specimens have recently been seen.

49. History.—In the development of the Pyle Leghorn, offspring were produced, especially females, having a light-gray instead of a brown body color. It has been stated that such females were mated with Yokohama males of the color of the Silver Duckwing. Other matings were made of Silver Duckwing Game females with males from the crosses made to produce the Pyle variety. In other attempts to produce Silver Duckwing Leghorns, White Leghorns and Duckwing Game males were bred together, and White Leghorns were also bred with Silver-Gray Dorkings. Bad comb and body formation and red ear lobes in the offspring resulted from all these crosses. Following their introduction at the Crystal Palace show, London, in 1886, these early Silver Duckwing Leghorns were taken up by a few fanciers, who gradually developed them into fowls of Leghorn shape having the same plumage color that is required for both the Silver and the Golden Duckwing Game fowls. Duckwing Leghorns of medium quality were shown in the United States about 1890, and a description of them appeared in the American Standard of 1894. In the English Standard

they are known as Silver Duckwing Leghorns and Golden Duckwing Leghorns.

50. Description.—The Silver Leghorn should have the same breed characters and body formation as other Leghorns. The color description is the same as for the Silver Duckwing Game fowls. The male has glossy black on the throat, breast, and body, including the tail plumage; the top color is silvery white, with white hackle marked with a narrow black stripe; the wing bars are black, glossed with a metallic blue; the beak, shanks, and toes of both males and females are yellow; the ear lobes are white; and the face, comb, wattles, and eyes are red. The only difference in the color of the Golden Duckwing and the Silver Duckwing Leghorn males is that the top color of one is a deep, rich golden, and of the other is a silvery white.

As described in the American Standard, the Silver Leghorn females have a silvery-gray hackle, and in the English Standard they are described as having a silvery-white hackle, both striped with black. The body plumage, according to the American Standard, is light gray; according to the English Club Standards it is a delicate silver or French gray. In both, the body color is described as stippled with a darker shade. The breast and under parts are salmon, shading to a lighter color at the thighs; the tail should be a darker gray than the body color. The American Standard permits black tail feathers, the topmost ones to be penciled with gray. The most beautiful exhibition specimens shown in England have dark-gray tail feathers that grow lighter on the uppermost feathers. The difference between the Golden and the Silver Duckwing Leghorn females is that the Golden Duckwings have a dark-gray plumage color, penciled with a darker gray or black, and the Silver Duckwings have a very light-gray plumage color, penciled with a darker shade.

51. Mating.—The great difficulty in breeding Silver Leghorns is to produce females of a clean, clear, French gray as called for in England. Under the American Standard, light gray is permissible. This description permits a darker shade than would be desirable in the golden variety. Some males,

SINGLE-COMB WHITE LEGHORNS

acceptable for exhibition as Silver Leghorns, may be bred from matings of fairly dark fowls, but to produce the beautiful surface color in females, very light-colored males must be used. The American Standard calls for gray under plumage. The most beautiful fowls are produced from mating fowls that have very light under plumage; for the production of the golden variety, it is necessary to have the same shade of color in the male breeding fowls that is most desirable in the Golden Duckwing Game males for exhibition. The same shade of color should exist in the females that exists in the most desirable females of the Golden Duckwing Game fowls. Both the males and the females for the production of the silver variety, which is the only one recognized by the American Standard, should have the clear surface color of the kind described in the Standard.

WHITE LEGHORN

SINGLE-COMB WHITE LEGHORN

52. Of all the many varieties of Leghorns, none has ever been so popular or bred in such large numbers as the **Single-Comb White Leghorn.** Careful investigation reveals the fact that the first white fowls of Spanish or Italian ancestry that were brought to America had white shanks and skin. Judging from the color of shanks and skin, the first Black Leghorns brought into New England were, like the whites, of Minorca ancestry. This fact is mentioned in support of a belief, which has been entertained to some extent, that the Minorca was the original Spanish fowl, and that it had the peculiarity of white skin and shanks, and that, on the other hand, the Leghorns belonged exclusively to Italy and possessed yellow shanks and skin. In substantiation of this, William Simpson, of West Farms, New York, in a letter states that in the year 1853 he purchased from a ship a White Leghorn cock, four White Leghorn hens, and one Blue Leghorn hen. They differed from the Leghorn fowls of the present in that they were somewhat larger and had white shanks. In 1860, Mr.

Simpson and others imported White Leghorns having yellow shanks and toes. The claim has been made, and it is fully substantiated, that Spanish and Italian fowls were brought into the United States as early as 1835, or earlier.

53. Origin.—The making of the exhibition Single-Comb White Leghorns of America was begun with the careful breeding of the White Leghorn fowls that came from Italy, by a few fanciers in the state of New York. As made by the fanciers of the United States, the White Leghorn was recognized by the American Standard of 1875, and from time to time, as the fowls have been improved, the Standard has been altered.

54. Development.—Leghorns have been developed very differently in America, in England, and in Australia. The type of Leghorn most admired in America is one with distinctive breed characters. It has been developed into a fowl of ideal character, both for exhibition and utility purposes. The English fanciers have altered the Single-Comb White Leghorn, by the introduction of Minorca blood, until they have made a fowl of different type—one much larger and less prolific than the American type. In Australia, Single-Comb White Leghorns have been developed midway in type and size between the English and the American types.

Where they are bred in America entirely for egg production and market purposes, more size has been developed than is usually sought in fowls for exhibition, yet the size of the utility Leghorns in America does not equal that of those bred in Australia.

55. History.—Leghorns, as bred in America in 1890, were of indifferent size; in fact, they were much too small either for market poultry or for producing eggs of size that would compare favorably with the eggs of fowls of other breeds. Since that time, the size of these fowls has been gradually increased until it is not unusual to have flocks of yearling hens that will average 4 pounds each, and males that will weigh over 6 pounds each. The eggs produced from a well-selected flock of Leghorns will average over 2 ounces each, or from 24 to 26 ounces per dozen.

At about the same time, the English fanciers began to change the Leghorns, and, in fact, all the Mediterranean fowls into larger proportions, greater weight, and a body formation more like the Dorking. They have also bred larger combs on Leghorns than have ever been countenanced in America.

In Australia, the poultry breeders first attempted to improve the Single-Comb White Leghorn by producing as large a fowl as possible without diminishing its egg-producing powers. The Australian breeders have accomplished their purpose well, and in addition have secured a good type of Leghorn for exhibition. Though the Australian exhibition Single-Comb White Leghorn does not conform entirely to the description in the American Standard, it comes nearer to the American than to the English type. The experts of Australia now declare that they have reached the limit of size in the Leghorns that it is possible to get without sacrificing any of the prolific egg-producing powers of the breed; the English experts admit that they have developed the Leghorn beyond the size that will give the most prolific egg yield. The results of the breeding operations in these two countries emphasize the fact that each breed and its varieties have been made for a definite purpose, and that to get the best results out of the fowls of the different breeds it is necessary to keep their size within reasonable limits.

56. Description.—The first description of Leghorn fowls published in America was printed in the Halsted Standard of 1867, which mentioned both Single- and Rose-Comb White Leghorns, and the Dominique Leghorn. The Halsted Standard described the head of the males as short and deep; the eyes, large, and full; the neck, long and well arched; the breast, full, round, and carried well forwards; the body, rather square but heaviest forwards, the tail, large and full, and carried upright; the shanks, long; the carriage, upright and pleasing. The description of the female conformed to that of the male. In the original Standard of the American Poultry Association of 1875, no Rose-Comb Leghorns were mentioned, but in the Standard of 1893, rose-comb and single-comb varieties of both the Brown and the White Leghorns were described. From

that time to the present, the general form of the Leghorn has been undergoing a gradual change, until this fowl now has a longer body formation than formerly, more length in front and in rear of the shank line, and an abdomen to conform with the breast and body formation. The head is of moderate length, the neck is long and arched, the back and body formation is of medium length, and is deep, round, and full. The greatest alteration in Standard description recently has been in the description of the tail formation.

The back of a well-formed Single-Comb White Leghorn exhibition male should form a half moon from the hackle to the base of the tail; the tail should be carried well back and down, but not so low as is preferred in the exhibition games or in the Hamburgs. The Standard states that the tail should be carried at an angle of 45 degrees, but many judges, in placing awards, give preference in the show room to lower tail carriage than this. The tail of the females should be spread like a half-opened fan, as shown in Fig. 1 (*a*), and, as viewed from the rear, should be slightly Λ-shaped, as illustrated in Fig. 1 (*b*). This tail should not be so much Λ-shaped as the tail of the Brahma or that of the Wyandotte, but enough to build out the saddle and coverts about the tail, thus forming a more attractively shaped back. The breast and body formation of both males and females should be full and rounding; the breast should be wide between the thighs; the abdomen should be full for the size of the fowl, and of a shape that makes a rounding body formation from the point of the breast in front of the shoulder down between the thighs and up to the lowest feather of the tail; the body should be fairly long, deep from the top of the back to the bottom of the breastbone, and wide at the center of the wing; all of these parts should, however, be in proportion to the size and the breed characters of the Leghorn fowls.

(*a*) FIG. 1 (*b*)

The head points of all Leghorns should be carefully considered, as in the Standard they are valued at 34 points. To secure credit for all, or even for the greater part, of these points, the head, and particularly the comb, of a Single-Comb White Leghorn must be of attractive formation. The comb should be of medium size and evenly serrated, with five points; the heel of the comb should round up from the base and stand away from the head. The comb of the Single-Comb White Leghorn male should not follow the shape of the head and neck, but should grow in an almost straight line back from the top of the head. The wattles must be of beautiful formation, and the ear lobes should be almond shaped, large, and smooth, like kid, in texture, and of pure enamel white. The comb of the female should be of the same general formation as that of the male, except that four of its points should fall over to one side, the first or front point standing erect. A single loop only is permissible in the comb of the female. The wattles and ear lobes should be as beautifully finished as those of the male. The eyes of both sexes should be round, full, clear, and bright red; and the beak, shanks, and toes should be golden yellow.

The color illustrations of Leghorns show the three types most popular in the show room. The color illustration of the Single-Comb White Leghorns represents the style of Leghorns most popular from 1908 to 1912. The color illustration of the Single-Comb Brown Leghorns is a portrait of living fowls that were the best during the same period. The color illustration of the Rose-Comb Buff Leghorns shows the body formation that has been most popular; and in addition it shows the style of rose comb considered best for all Rose-Comb Leghorns.

The plumage of White Leghorns should be pure white throughout, including the quill and the under fluff of the feathers. The skin, beak, shanks, and toes should be yellow; the ear lobes, white; and the combs, face, wattles, and eyes, red. It has always been difficult to maintain pure white in the ear lobes and a golden color in the shanks and toes. A number of the offspring will have a creamy tint, and many a distinct yellowish tinge in their ear lobes. Pure white ear lobes are an absolute necessity in the show room.

57. Mating.—In mating Single-Comb White Leghorns for the production of exhibition fowls, only males and females having perfect breed characters, pure white plumage, beautiful heads, combs, wattles, and ear lobes, and bright red eyes, should be selected. It will be impossible to succeed in producing good offspring unless the males and females in the matings are practically perfect. Special attention must be given to the selection of breeders with beautiful combs. Only fowls with ear lobes of perfect shape and color can be depended on to reproduce offspring with ear lobes of the proper type. It is possible to succeed with old hens that have white, or nearly white, shanks. From such females, fowls with beautiful plumage color are often bred. The color of the shanks in the offspring will be much improved if they are permitted to range through grass and clover fields.

Tail plumage is of prime importance in Single-Comb White Leghorns for breeders. Only females that have well-spread tails are suited for the matings. The males should have an excessive amount of saddle plumage, long, flowing sickles, and a full main tail that is well spread and carried somewhat lower than is described in the Standard. The tails of the females used for breeding exhibition males should be carried lower than is necessary in females for producing exhibition pullets. Leghorn fowls that conform closely to the Standard description when seen at freedom and posing in a natural position are the ones that can be depended on to reproduce offspring of the finest exhibition quality.

ROSE-COMB WHITE LEGHORN

58. Origin.—Many theories have been advanced concerning the origin of the **Rose-Comb White Leghorn.** The accepted opinion at the present time is that this variety originated from crossing Single-Comb White Leghorn with Rose-Comb White Hamburg fowls, and was developed by selecting and mating the best offspring of this cross.

59. Development.—The Rose-Comb White Leghorn has been developed not by any one fancier, or by any group of fanciers, but by poultry fanciers throughout the world.

60. History.—The home of the original Rose-Comb White Leghorns in America was in New England and in New York State. The secretary of the Rose-Comb White Leghorn Club of America, writing the history of this variety of fowls, states that he has been unable to trace definitely their origin, development, and history; and that after a diligent search for authentic information, he has accepted as final the belief that they were originated as just stated.

61. Description.—The Rose-Comb White Leghorns should have the same general breed characters as required for all Leghorns, except that they must have a rose comb of medium size fashioned after the Hamburg comb, but smaller and more delicately formed.

62. Mating.—Fowls having the same general breed characters necessary for producing Single-Comb White Leghorns, must be selected for matings of the Rose-Comb White Leghorns, and careful attention must be given to selecting fowls having small, beautifully formed, and evenly serrated combs, with small, projecting points; the heel of the comb should stand out from the back of the head, but not so much as the comb of the Hamburg. If satisfactory results are to be obtained, equal attention must be given to selecting both males and females with the proper comb formations. The combs on the fowls in the color illustration of the Rose-Comb Buff Leghorn are of the proper formation.

NON-STANDARD VARIETIES OF LEGHORN

BLUE LEGHORN

63. Blue Leghorn fowls have frequently appeared in many localities throughout the world, but it was left for the English fanciers to bring them into public notice. Many of them were shown at the International Show of 1908 in London. At this show more fowls of the blue variety were shown than of any of the other varieties. A few weeks afterwards there was a noticeable display of Blue Leghorns at Leeds, England.

It is said of this display that the quality was splendid and that there also the blue fowls outnumbered those of all the other varieties shown.

64. Origin.—The Blue Leghorn was produced in the same manner as the Blue Andalusian and all the other blue-plumaged fowls; that is, by the promiscuous intermingling of black and of white fowls in their native lands. The make-up of fowls of this color is fully told in the description of the Andalusian fowls.

65. Development.—During recent years, unusual care has been given in England to the development of this variety. In fact, more attention has been bestowed on them there within the past 10 years than ever before. Since blue fowls have been increasing in popular favor, Blue Leghorns have been developed by selecting and mating the best specimens that could be found.

66. History.—Since the increased popularity of blue-plumaged fowls, the English poultry press has given them much publicity and has said much in their favor. As a result of this, the Blue Leghorn is one of the most popular Mediterranean fowls in England.

67. Description.—The Blue Leghorn is a perfect Leghorn in form and general make-up, according to the Mediterranean type, which is most highly esteemed in England. The fowls are of large size, bordering on the Minorca type, with larger combs than are admired for Leghorns in America. Their plumage is blue throughout, with a darker metallic shade of blue in the hackle and saddle of the males; the beak is horn color; and in the shanks and feet, yellow or orange is preferred. One English club standard says that the shanks and toes shall be yellow or orange; the plumage, one even shade of blue from head to tail; and the hackle and saddle of males, darker blue. Any trace of foreign color is objectionable.

68. Mating.—For mating with Blue Leghorns, Cuckoo, or Dominique, Leghorns have been used. The alien blood in this variety may have done more or less harm to the Blue Leghorns.

Andalusian blood can be used with greater safety. Those who have succeeded best with the Blue Leghorns advise the selection and mating of only the best fowls that can be secured. In some instances the best males are bred from females that are much too dark for exhibition, and the best females are sometimes bred from males having the proper shade of color, mated with females perfect in color, both males and females having perfectly colored wings and tails. The color of the under plumage of these fowls is of great importance; it should be of a lighter shade of blue than the surface color. Some call this slaty blue; others call it a dark or bluish gray, but it should be blue, a tint or two lighter than the surface color.

DOMINIQUE LEGHORN

69. The **Dominique Leghorn** was described in the Halsted Standard, and also in the original Standard of the American Poultry Association, but was omitted from the Standard of 1898, and since that time has not been recognized in the American Standard. In England the variety is known as *Cuckoo Leghorn,* and the fowls are described in the English Standard as Leghorns of true form and as having plumage color the same as the Barred Plymouth Rocks.

70. Origin.—How the original Dominique Leghorn fowls were made can only be surmised. It is logical to suppose that they would occur naturally in mixed flocks of Black and of White Leghorns. Those that have been produced during recent years have come from crossing Black Leghorn males having fine, white ear lobes and good colored shanks and feet with Black Plymouth Rock females. Their offspring have been selected and bred for breed characters and Cuckoo color (barred plumage), until a variety of more than ordinary quality has been obtained.

71. Development.—The development of the Dominique Leghorns during recent years has been carried on entirely by the fanciers of England, who have made and developed the fowls to their present type.

72. History.—The early Cuckoo, or Dominique, Leghorns, as seen in America, were small and unevenly barred or marked with the plumage color of the Dominiques. But few had distinct bars across their plumage. They deteriorated so much that they were dropped from the Standard of 1898. Later, the English fanciers renewed their interest in them, and since 1900, a few good specimens have been seen at some of the leading English exhibitions.

73. Description.—The English Standard describes the Cuckoo, or Dominique, Leghorn fowls as having the general breed characters that are desirable in all varieties of Leghorns. Their plumage should have color and markings throughout the same as in the Barred Plymouth Rocks. Only a few have been produced that have met the requirements of the Standard. In America, they should have the same form as other American Leghorns, and plumage like the Barred Plymouth Rocks.

74. Mating.—To succeed with this variety, only the best males and females that can be obtained must be selected and bred. The breed characters must have due consideration, and careful attention must be given to the selection of fowls having desirable combs and ear lobes, and yellow beaks, shanks, and toes. The fowls are usually more or less deficient in these respects. In breeding for the production of color, the same methods of mating should be followed that are practiced in standard matings for Barred Plymouth Rocks.

MOTTLED LEGHORN

75. There are several varieties of **Mottled Leghorn,** the most prominent of which are the Black-and-White Mottled and the Red-and-White Mottled. The Black-and-White Mottled Leghorn has plumage marked like the Mottled Java or the Spangled Orpington. The Red-and-White Mottled Leghorn has a mixture of white and brownish red evenly distributed. There is no proof that these two varieties had a common origin. It may be that the Black-and-White Mottled have

come from the Anconas and the others from badly marked offspring that occurred in an attempt to produce the Pyle Leghorn. These varieties are not considered as standard bred in any locality, but are mentioned from time to time more as a novelty to be exhibited in the "any-other-variety" classes than as separate varieties.

PARTRIDGE LEGHORN

76. Origin.—The **Partridge Leghorn** has been known to exist in Denmark for many years. It is thought that the first of these fowls seen in England were brought from Denmark. As they now exist, they have been made by crossing Brown Leghorn males with Partridge Wyandotte females.

77. Development.—The greatest development in the Partridge Leghorn has been accomplished in England, and some attempts toward the improvement of the variety have been made in New York State.

78. History.—When first brought to America, Brown Leghorns were of irregular color and markings. Later, when a strain of cockerel-breeding Brown Leghorns had been established, many of the female offspring had irregular markings in their plumage. These were selected and from them a strain of partridge-colored Leghorns was started. The penciling in the females has been acquired by mating Brown Leghorns with Partridge Wyandottes, and selecting and remating the best offspring, year after year, until partridge-colored Leghorns having fairly good color and markings were obtained.

79. Description.—The Partridge Leghorns should be the same in form and head points as the other varieties of Leghorns. The plumage color should be the same as described for Partridge Wyandottes.

80. Mating.—In mating Partridge Leghorns, the breeder has the same difficulties to contend with as in mating for plumage color in Partridge Cochins and Partridge Wyandottes. The same rules for the selection of breeders and for mating apply to the mating of all three varieties. In mating Partridge

Leghorns, unusual care should be taken to select fowls that have proper head points, including the ear lobes. The beak, shanks, and toes should be yellow.

PYLE LEGHORN

81. Origin.—The credit for having originated the **Pyle Leghorn** belongs to G. Payne, of England, who mated White Leghorn males with Brown Leghorn females. The offspring thus produced were carefully selected and the best were mated, the breeders being selected on the same lines as Pyle Game fowls for producing proper color and markings are selected.

82. Development.—In the development of Pyle Leghorns, Brown Leghorn females showing more or less white in their plumage were bred with White Leghorn males; Brown Leghorn males were mated with White Leghorn females, and the best offspring from these crosses were selected and mated in a manner that has produced fowls of color and markings equal in beauty to the Pyle Game fowls.

83. History.—The Pyle Leghorn has been bred by various fanciers throughout the world, who have made and developed the fowls into creditable quality. Some of the Pyle Leghorn pullets that have won at the leading shows of America have come from the promiscuous intermingling of Brown and White Leghorns.

84. Description.—The Pyle Leghorn has the same breed characters as other varieties of Leghorn, with color and markings like the Pyle Game fowls. In both males and females, the beaks, shanks, and toes are yellow; the eyes, comb, wattles, and face, bright red; and the ear lobes, white. In the males, the head and the hackle plumage are bright orange; the breast, body, and thighs, white; the back, wing bows, and saddle, red, dark red, or maroon; the wing bars, white; the wing bays, chestnut; and the main tail sickles and coverts, white. The plumage of the females is white throughout, except the neck hackle, which is tinged with gold, or orange; the breast is salmon, shading to white at the thighs; both males and females

SINGLE-COMB BLACK MINORCAS

should be free from markings or splotches of any kind in the white plumage.

85. Mating.—Pyle Leghorn males that have a dark shade of red, mated with females that have a deep or rich shade of salmon on the breast produce offspring of better color than are likely to come from matings of lighter-colored fowls. To increase or intensify this color, in future generations males selected from a pullet-breeding strain of Brown Leghorns that have little or no striping in the hackle or saddle plumage should be selected for breeding with the Pyle Leghorns. No striping is permissible in the hackle or saddle feathers of the Pyle Leghorns, and bright yellow shanks and beaks are necessities. To improve the color, the methods necessary for the production of the best color in Pyle Games should be applied to this variety.

MINORCA

ORIGIN AND DEVELOPMENT

86. Origin.—Some writers have claimed that the **Minorca** fowls were the foundation stock from which the Black Spanish have come. Others claim that the Minorcas were the first fowls brought to America, and that they were called Leghorns. At all events, Minorcas were formerly much smaller than at the present time. In writing of Minorcas, Edward Brown, of England, claims that a fowl known as the Castilian was the original type, not only of the Minorcas but of the other Mediterranean fowls as well. He states: "We have no direct evidence as to the origin of this fowl, but in Spain it is believed by many that it was introduced during the time when the Moors held that country, and it is often called the Moorish fowl. It was widely distributed throughout old Castile, which comprises a great part of the tablelands to the north of Madrid, as well as Andalusia; and Don Salvador Castello, director of the poultry school at Barcelona, says that it was formerly known in the provinces of Ciudad Real and Zamora; in the last named, it is frequently known under the name of Zamorana,

but, as already noted, birds more or less of the same type have been widely distributed and may be accepted as the common fowl of the country. Although the majority are black in plumage, there is considerable variety in colorations and markings, as is customary where care in selecting has not been observed."

The early illustrations of the Castilians and the Minorcas show the former to be a more finished type of fowl than the Minorca, and the illustrations of 1800 show the Minorca to be a black fowl of early Leghorn type, with an abundance of comb and a very small, partly white ear lobe. The Castilians, as shown by illustrations, were distinctively Leghorns in the comb of both males and females, in the body formation, and in the shape and color of the ear lobes, which were shown as white.

87. Development.—The Minorcas were developed in England more than in America. In America, they were transformed from the English type of fowls into the type of Minorca shown in the color illustration of Black Minorcas. They were originally of many colors, and the first that were developed to any extent were the single-comb blacks, then the single-comb whites, and, following these, the rose-comb blacks and the rose-comb whites. Recently the cuckoo, or barred, and the blue varieties have been developed.

BLACK MINORCA

SINGLE-COMB BLACK MINORCA

88. Origin.—The modern type of **Single-Comb Black Minorca** originated from the best fowls of their kind that could be selected from the importations from their home country. The credit for their origin belongs to the fanciers of America and England.

89. Development.—The Single-Comb Black Minorcas have been developed along different lines in America and in England. In England they have been developed into larger

fowls than are preferred in America. The fanciers of England encourage larger combs than the fanciers of America. Of necessity, the methods of feeding for heavy body formation materially increases the size of the combs and wattles.

90. History.—More than a century ago large, black-plumaged fowls having ear lobes partly white were brought from the island of Minorca, in the Mediterranean Sea off the coast of Spain, into England, and were bred for egg production and for market poultry. Shortly after their introduction into England, English travelers visiting the island of Minorca, selected fowls of a type that suited them, and took them to England. These fowls were known as Minorcas, as Spanish, and as Red-Faced Black Spanish, proving that there were fowls of about the same type, though some had red and some had white faces. John R. Wood, secretary of the Minorca Club of England, has stated that he could trace the existence of Minorcas as far back as 1870. The most reasonable information obtainable warrants the statement that the early Spanish, the Minorcas, and the Leghorns were more or less intermingled.

When the Minorcas became exhibition fowls, efforts were made to develop them into fowls of larger size than those of any other Mediterranean breed. Crosses were made with the Black Spanish and the Black Langshans. The claim has been made that the Langshans used had black eyes and shanks without feathering. Following these crosses, a system of selection and of feeding for size and better form was followed, until the present type of Minorca fowl was produced. It has been claimed that fowls known as Minorcas were brought into the state of New York about 1870, but they did not exist in any numbers in America until about 1890. Since that time, rapid improvement and marked changes have been made in them both in England and in America. The English fanciers have adopted a more bulky type than the American fanciers. The fact that they bear confinement well and lay well under such conditions has made them popular in England. Their beauty for exhibition and their utility as producers of large eggs has made them popular in America.

91. Description.—The shape of the Single-Comb Black Minorcas as bred in America is shown in the color illustration of them. The accepted type as bred in England and acknowledged by the Minorca Club of that country, is shown, by permission, in Fig. 2. The head of the Minorca should be of good length and of fairly good breadth, in order to support the large comb. The comb is single; its width should be such as to conform to its length, height, and thickness; it should have enough

FIG. 2

strength to stand erect and yet be of fine texture, smooth, and evenly serrated. Six points are best suited to the Minorca comb, although some of fairly good appearance have five, and some have seven points. The ear lobes should be rather large and of proportions suited to the size of the head and its attachments.

Large combs, wattles, and ear lobes are best suited to the largest males, and the same is true, proportionately, of the females. The neck should be long in comparison with the body, well arched, and profusely covered with hackle feathers

that grow well down over the shoulders; they are naturally longer in the male than in the female. The comb of the female should hang over to one side. There should be a double fold at or near the end of the comb of the female; and, although the comb is large, it should not entirely obstruct the eyesight. The eyes of the Black Minorcas should be dark or nearly black; dark brown is permissible, but red or light-colored eyes should almost disqualify a Black Minorca for exhibition, though such is not the ruling of the Standard. Light-colored eyes indicate that alien crosses have been made in a strain to improve size or color. The body formation, including the back, should be long, deep, and well rounded, with a full breast, long breastbone, and good abdominal development.

The main tail feathers, in both males and females, should be of reasonably good length and be moderately spread; sickles and coverts of the male should be of fairly good length. The tail carriage should be about as shown in the color illustration of the Black Minorcas. The thighs and shanks should be of medium length, as compared with the great length of leg sought in the modern type of Langshans; to conform with body formation, they should be proportionately longer than the thighs and shanks of Leghorns. The general carriage of the male should be upright, and the female not so much so. The shanks should be smooth and the scales even. The color of the shanks and feet should be as dark as it is possible to have them; shiny black is preferred; slaty black is objectionable. Slaty black shanks have come to the Black Minorcas from the Black Spanish. The plumage throughout should be a lustrous black, brilliant with sheen. Purple, red, or other foreign color of any kind in the plumage is objectionable. Red in the ear lobes is also objectionable. Formerly, the Minorcas showed more or less white in the face. This came from a crossing with the Black Spanish. After a reduction in the size of the ear lobes had been accomplished, less white was found in the face.

Single-Comb Black Minorca cocks should weigh 9 pounds; cockerels and hens, $7\frac{1}{2}$ pounds; pullets, $6\frac{1}{2}$ pounds. Single-Comb White and Rose-Comb Black Minorcas should weigh 1 pound less than these weights.

92. Mating.—In mating Single-Comb Black Minorcas for the production of exhibition fowls, hens of large size and perfect type should be selected. For producing pullets, hens with combs that hang over nicely to one side, with perfect loops in them, should be selected. For producing cockerels, females having combs that stand erect should be used. By carefully selecting and mating for such results, a line of females with straight combs that are strong at the base and evenly serrated, will be established. Such hens should be mated with males that have perfect combs and that have been bred in line from hens of the same type. Cockerels with combs of delicate formation are best for mating with hens for producing pullets.

Size, Minorca breed characters, and perfect plumage color are the main points to look for when selecting breeders. It is useless to attempt to produce Minorcas of the finest exhibition quality without having hens of large size that conform to the foregoing description and are nearly perfect in all Minorca requirements. In addition to this, strains for breeding both males and females must be established. Dark under plumage and perfect surface plumage, with plenty of sheen, are necessities. In mating for color, red is apt to appear in the plumage of the hackles and the saddle. To relieve this, hens without sheen should be introduced into the matings. Males having very large combs may be dubbed (the combs cut off to within half an inch of the head), when used for breeding purposes.

To get good results from breeding Black Minorcas, the novice must depend on the experience of older breeders and have them select the fowls for the matings. Records should be kept of the offspring from each hen, and from the results obtained it will be possible to tell which hens are best for producing cockerels and which for producing pullets. After a careful study of the results obtained, the breeder can be guided by these results in selecting the males and females for future matings. Few fowls require more careful handling than the Minorcas, and only those willing to pay the most attention to their selection, mating, feeding, and general care will succeed with them. They will not stand crowding, and the males

must have plenty of room to move about on the roost. Obstructions that are apt to bend or break the wing or tail feathers should not be permitted where Minorcas are kept.

ROSE-COMB BLACK MINORCA

93. Origin.—The **Rose-Comb Black Minorca** originated from offspring that came from the single-comb variety and that had combs of irregular shape, more like a rose than like a single comb. These fowls were separated and bred to establish a rose-comb variety. Black Hamburgs were bred into them, and although such crosses showed bad results at first, the outcome has been a Black Minorca of good quality with a rose comb.

94. Development.—The early development of the Rose-Comb Black Minorca was made in America. For some time these fowls were bred only in the state of New York. Later they were distributed and crossed with Black Hamburgs.

95. History.—The Rose-Comb Black Minorcas originated with George H. Northup, of Raceville, New York, who bred them until they were fairly well established, when they were distributed throughout the world. About 1895 some Rose-Comb Black Minorcas were sold and shipped to Germany. Since that time the Rose-Comb Black Minorcas have been popular.

96. Description.—The Rose-Comb Black Minorcas are identical with the Single-Comb Black Minorcas, with the exception of the comb. This should be of fairly good size, formed in front like the comb of a Hamburg, but larger and heavier in proportion; the spike should extend well back and show a tendency to follow the shape of the head and neck. The plumage color in all sections should be the same as in the Single-Comb Black Minorcas.

97. Mating.—The same kind of fowls, with the exception of the comb, should be selected for mating to produce both the Rose-Comb and the Single-Comb Black Minorca. Rose-

Comb Black Minorca males or females that have badly formed combs, that is, combs that are crooked or rough in general formation, should not be selected for producing the finest exhibition specimens. Males and females are bred from the same matings; this simplifies the selection of the breeders and the work of breeding. Only fowls having the proper breed characters, good color, and the best combs should be selected.

WHITE MINORCA

SINGLE-COMB WHITE MINORCA

98. Origin.—In early poultry writings mention is made of the White Spanish and the **Single-Comb White Minorca.** One of the earliest breeders of Minorcas stated that in 1835 he had some white offspring from his Black Minorcas. But earlier than this the statement was made that all colors of Minorcas were found in their original home. Many years ago they were more plentiful than in 1895. Since that time they have been reestablished as a variety by selecting and carefully breeding the Minorcas that came with white plumage.

99. Development.—The Single-Comb White Minorcas have been developed in both England and America from sports that came from the Single-Comb Black Minorcas.

100. History.—The first Single-Comb White Minorcas that were bred in America originated in the central part of New York. After their appearance they were sparingly bred throughout the United States and Canada, and they are mentioned as having appeared in England at about the same time. The type of White Leghorns and that of White Minorcas bred in England are so nearly alike that they can be distinguished only by the color of their shanks, which are yellow in Leghorns and pinkish white in Minorcas. This variety has never become popular in any locality, but it has been admitted to both the American and English Standards.

Rose-Comb White Minorcas

101. Description.—The Single-Comb White Minorca must conform in every way to the breed characters of the Black Minorca. The only exception is that in the White Minorca the beak, shanks, and toes are pinkish white, the eyes are red, and the plumage is pure white.

102. Mating.—To be successful in the breeding of Single-Comb White Minorca fowls, the males and females selected for breeders must have quality equal to the best Single-Comb Black Minorcas. The fowls selected must have pure white plumage, red eyes, ear lobes of large size and perfectly white in color, and shanks and feet of a pinkish-white color. Size, shape, color, and head points must all have careful attention. If the rules for mating the black variety, with the exception of color, are applied to the white variety, offspring of improved quality will be produced.

ROSE-COMB WHITE MINORCA

103. Origin and Development.—The **Rose-Comb White Minorca** is said to have been originally produced by crossing some Rose-Comb White Leghorns with White Minorca females that had combs like the Malay or the Aseel. Such combs might have occurred by atavism, because of the fact that White Malays were used in crossing with the White Leghorns of England to gain greater length in shank in the White Leghorns. Splashed white-and-black offspring are said to have been used, and finally a rose-comb black male was crossed with the best rose-comb white females that could be selected. From these crosses, the best offspring were selected, mated, and remated until Rose-Comb White Minorcas of good quality were produced.

104. History.—The Rose-Comb White Minorca is a variety that has not been recognized by the American or the English Standard. It is a comparatively new variety that has been improved since 1906.

105. Description.—The Rose-Comb White Minorca must conform in a general way to the requirements for the other varieties of Minorcas. They must have combs the same

as described for the Rose-Comb Black Minorcas; the eyes, shanks, and plumage color should be the same as in the Single-Comb White Minorcas. A bluish tinge is sometimes seen in the shanks of specimens that are otherwise of good quality. This tinge in the shanks indicates a cross with the Hamburgs, and is detrimental to breeding qualities.

106. Mating.—The best fowls of the Rose-Comb White Minorca variety should be mated. Only those having white skin, pinkish-white shanks, and pure white plumage should be used. Head points and proper breed characters should receive marked attention. The comb is one of the most attractive features of this variety, and all fowls having irregularly formed combs should be excluded from the breeding pens.

NON-STANDARD VARIETIES OF MINORCA

BARRED MINORCA

107. Barred Minorca fowls have been produced that have plumage color like the Barred Plymouth Rocks. These fowls have but recently come into notice. A request was made to the American Poultry Association at its meeting in 1910 to admit the Barred Minorca to the Standard, but the application was rejected. The fowls of this variety that were sent to St. Louis for examination by the revision committee of the American Poultry Association, were but little, if any, larger than the Dominique Leghorns, and their color was mottled or splashed rather than barred. In England some were shown in 1908, and they were called Cuckoo Minorcas. They have made but little progress in the way of development.

The coloring of the Barred Minorca would be a natural result of the promiscuous intermingling of Black and of White Minorcas. To breed fowls of this variety of satisfactory quality it is necessary to carefully select the breeders for shape and color, year after year, until size, shape, and color have been well established.

BLUE MINORCA

108. Blue Minorca fowls having the same plumage color as the Andalusian have been produced. It is thought that they have been made by selecting the largest Andalusian males and crossing them with females with slaty-blue plumage, which has come from Black Minorcas. They must have the breed characters of the Minorca family, and plumage color like the Andalusian.

To produce the proper color in the blue Minorca, the same general rules must be applied as are necessary for the production of the Andalusian. Little or no progress has been or can be made in these fowls, because of the fact that they are looked on as large-sized Andalusians. As they have no variety distinctions except color, there will be no certainty of their popularity if admitted to the Standard as a variety of the Minorca family.

SPANISH

ORIGIN, DEVELOPMENT, AND HISTORY

109. Of all the varieties of fowls that have been accredited to the Mediterranean districts, only the **Spanish** fowls were mentioned in the earliest publications. Bonington Moubray mentions them in his earliest writings (1816). He says: "The Spaniard is very large; the plumage is black, the flesh white and delicate, and the new variety equals in size the old Duke of Leeds breed." In 1834, in a revision of his earliest publication, he describes the Spanish fowls as large fowls with black plumage, flesh white and delicate, but inferior in size to the old Duke of Leeds breed. He states that they are well adapted for capons, and that they produce eggs nearly equal in size to those of the Malay hens. He says: "This breed is now common, particularly in London. They are all black, with black legs, and rich, red combs and gills, and far too high on the leg." He illustrates them in colors, showing them with white faces. Rev. Edmund Saul Dixon, M. A., writes of them in his book

on "Ornamental and Domestic Poultry," published in 1850: "The Spanish breed is in all probability of ancient and remote origin, and does not seem to have reached us from the country after which it was named. In North Devon they call the Spanish fowls Minorcas; others call them Portugal fowls, and neither term removes them far from their old established location, if not their original home. * * * The thoroughbred birds of the fancy should be entirely black, and when in high condition, should display a greenish, metallic luster. The combs of both cocks and hens are exceedingly large and of a vivid and most brilliant scarlet; that of the hen droops over on one side. Their most singular feature is a large white patch or ear lobe on the cheek, which, in some specimens, extends over a great part of the face. It is of a fleshy substance similar to the wattles; it is smaller in the hens, but very large and conspicuous in the cocks."

He further states: "Such birds are occasionally produced handsomely streaked with red on the hackle and back. This is no proof of bad breeding. On the contrary, it is as near as may be the sort which Columella's relatives might have kept in Spain at the time when he was improving the native sheep by the importations from Morocco, 1,800 years ago." He also says: "The Blacks were not the only valuable race of Spanish fowls." And he mentions the existence of gray or speckled fowls, the latter being of a slaty gray with white legs. He mentions importations that were made into England in 1846–47, among which were speckled, black, and white fowls, in shape and carriage very much like the Speckled Polish (except that they were much longer in the leg), that had top-knots, a tuft of feathers hanging under the throat, and white legs. The others were pure white, in shape and carriage like the Black Spanish, lacking only the white cheek patch.

Following the statements of Dixon in 1850, there is evidence of the existence of black, speckled, and white fowls with white faces and white ear lobes, and of others having the same colors and white ear lobes, but lacking the white faces. The white fowls had the shape, carriage, and length of leg of the Spanish, and in addition to this, the crest and beard of the

White-Faced Black Spanish

Polish, with no white cheek patch, indicating that there were all kinds and colors of fowls in the Spanish countries. These are now included in the list of Mediterranean and Polish fowls.

Martin Doyle, in his book, "Domestic Poultry," published in London about 1850, writes many pages about the Spanish fowls, and sums up their origin in the following statement: "The fowls called Spanish are not aboriginals of Spain, but were imported into that country either from some portion of the East through the Mediterranean or, as has been affirmed, from the West Indies, by Spanish merchants and subsequently propagated and naturalized in Spain, and from these into European countries. Those birds differed from the present Spanish in having a smaller and less white face and darker feet and shanks. We find that previous to the introduction of birds for egg production, a diminutive species known by the name of Manx was the common class of fowls reared in Spain. These two breeds were crossed, varieties were thence raised, and the present subvarieties of the Spanish fowls are partly the result. In Holland, before the naturalization there of the Spanish fowls, a domestic bird—in color a dun, or bluish slate—though not much inferior to the other, prevailed. But if we carefully observe the variations in this latter class, it becomes evident that such differences are the results of admixture with the primitive breeds."

In early days, a Black Spanish cock weighed from 7 to 8 pounds, and a hen from 6 to 7 pounds. The cock was from 21 to 22 inches in height and the hens about 19 inches in height. This measurement from the ground to the top of the back is about the same as that of the present type of Langshans.

Harrison Weir states that the Spanish fowl might be the kind alluded to by Columella as having large white ears and more given to laying than to sitting. Perhaps the fowls referred to may have been the ancestors of those mentioned by other writers. Spanish writers speak of the Spanish fowl as a rare breed, the origin of which is difficult to trace. Martin Doyle's reference to them, in which he states that they were brought from the West Indies, might be true, as the Spaniards would naturally carry the fowls of their country into all their

possessions. The Spaniards were great traders. Their wines were freely used in every inhabited land, and naturally their poultry would go with the trading ships.

The variations in the early descriptions of Spanish fowls, different writers stating that they had white faces, white patches on the cheeks, white ear lobes, and red ear lobes, seem to be natural, considering the fact that at that time there was great confusion in distinguishing between varieties of all fowls. These were not, by any means, the only variations mentioned. For instance, it was stated by one writer that the plumage and shanks were black in the Black Spanish and white in the White Spanish fowls; Minorcas were described as having both white and red ear lobes, and also as White-Faced and Red-Faced Minorcas and Spanish.

After reviewing all the information on the subject, it seems safe to conclude that all fowls having white faces or white ear lobes have descended from the early fowls mentioned by Roman writers in the year 35 A. D. as having large white ear lobes.

WHITE-FACED BLACK SPANISH

110. Origin.—The **White-Faced Black Spanish** variety as it now exists, had its beginning with some one of the many kinds that came from Spanish countries, and has been made since 1850. Its beginning was in fowls selected for their breed characters and pure white faces, the white extending over the entire face and, as shown in color illustrations of 1850, down half the length of the wattles on the males and below the wattles on the females.

111. Development.—The development of the White-Faced Black Spanish has been gradual. From year to year improvements have been made in the size and distribution of the white in the faces, until so much of this has been developed as to be objectionable to a great many fanciers.

112. History.—Two varieties, the white-faced black and the white-faced white, have been mentioned since the beginning of poultry literature. The white variety has never

become popular. In both the original English Standard and the Halsted Standard, only the black variety was described, but in the Halsted Standard the White Leghorn was described as having a white face, thus emphasizing the confusion that existed as late as 1863 in the individuality and separation of the breed. At one time the White-Faced Black Spanish was the most popular exhibition fowl in England, but of late these fowls are kept as novelties and not for utility. They were originally bred in England for egg production and for market poultry and were highly considered for capons.

113. Description.—The color illustration of the White-Faced Black Spanish shows the breed characters, the white face, and the plumage color of the modern White-Faced Black Spanish. The description of these fowls found in the earliest Standard conforms to their description at the present in both the American and the English Standard. From the first they have been mentioned as large fowls having an upright and attractive carriage. They have always been remarkably long in leg, an indication of relationship to the Malay.

The color of both the males and the females is identical. The combs and the wattles are bright red; the eyes, dark; the shanks and toes, preferably black or nearly black, but frequently of a bluish-gray cast. The plumage is black throughout and brilliant with a greenish sheen. The wattles of the male are frequently white on the under side. The face is opaque white and pendent, on the male hanging down almost on a line with the back, but not so large in the female. In some instances males have white faces more than 6 inches long and 4 inches wide on each side, and the females are proportionate in size. The chief difficulties to be avoided in breeding White-Faced Black Spanish are red in the face and any rough, corrugated growths on the face, which are apt to cover the eyes. The face should be smooth and the eyes unobstructed.

114. Mating.—In mating the White-Faced Black Spanish for exhibition, only fowls having perfect or nearly perfect breed characters, large faces, that are long, pendent, and per-

fectly smooth, should be selected. Perfect combs and black shanks should always be preferred. During the winter months the Black Spanish fowls should be protected from the cold, so that their faces will not be frozen. If this part should be frozen the beauty and value of the fowl will be destroyed. It is not unusual for the combs of Black Spanish used in breeding to be dubbed or cut off to within half an inch of the top of the head. All females used for breeding should have perfect combs that fall over to one side, but not so much as is usual with the Minorca females.

WHITE-FACED WHITE SPANISH

115. As stated, the **White-Faced White Spanish** had a common origin with the Black Spanish. They have never been popular, nor have they been developed to any extent. They are not recognized as a standard variety either in America or in England. The fact that their white faces and white plumage form no contrast has prevented their cultivation. The coming of the White Leghorns and the White Minorcas made their presence unnecessary, and it is very doubtful whether a pair of White-Faced White Spanish fowls could be found that would be of a quality worthy of consideration. It would, however, be possible to renew them by careful breeding and selection for breed characters and white faces.

BANTAM FOWLS

GENERAL REMARKS

1. Origin.—Bonington Moubray, in his earliest writings, states: "Bantams belong to a well-known small breed, originally from India, valued chiefly for their grotesque figures and delicate flesh. * * * There has lately been obtained a variety of bantams extremely small and as smooth legged as a game fowl. From size and delicacy they are very convenient, as they may always be used in the place of chickens when small ones are not to be had. They are also particularly useful for sitting on the eggs of partridges and pheasants, being good nurses as well as good layers."

Rev. Edmund Saul Dixon, of England, states that bantams came from a locality on the island of Java, known as Bantam, and he refers to the yellow, or Nankin, bantams as the most prominent of that time. The term Nankin will be misleading unless it is understood as referring to the buff or nankeen color of the fowl; it has no reference to the city in China known as Nankin, or Nanking. He describes them as yellow fowls with dull-blue legs and feet and small combs, and also says that there are subvarieties in which there is more brown after the fashion of some game hens. The Nankin bantams must have been of the same origin as the Pekin bantams, which came from China, and both must have been related to the Silkies, for all had the bluish tinge in shanks and feet and many had five toes.

The Creeper is another type of bantam mentioned by Dixon. He quotes from a number of writers relative to it, and accredits Aldrovandi with having said: "But the hens which Longolius

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calls pigmy exist here and there; they creep along the ground by limping rather than walking; we call them dwarfs." It would seem from this that many centuries ago a fowl existed that closely resembled the Japanese Bantam of the present and was called the Creeper. The earliest report of it is accredited to the 15th century.

2. Distribution and Development.—The first bantam, or pigmy, fowls are said to have come into English possessions in trading vessels known as the King of Bantam's ships. These were of but few varieties. Perhaps the Nankin, or yellow, bantam and the black and white bantams were the first to come.

The dwarf Creeper, now known as the Japanese, and the woolly hen, now called the Silky, came with the earliest importations from Oriental countries. Frizzle bantams from Japan were mentioned early. All of these were crude, and were not separated into distinct breeds or varieties. The Nankin, or yellow, and the black and the white bantams were mentioned by name because these plumage colors were predominant in them.

Bantams as they now exist originated about 1796, when the foundation for the first made breed was laid. Following this, poultry fanciers began to improve bantams and to separate them into varieties, the first of which were the Golden Laced and the Silver Laced Sebright Bantams.

Wm. Flamank Entwisle, of England, originated Asiatic, Malay, Indian Game, and Aseel Bantams, and did much to improve all breeds of bantams, and a tribute of respect from the bantam fraternity of the world is due to him. As his great work is acknowledged here, his name will not be mentioned when the different varieties of bantams are described.

3. Size.—The general rule now accepted for size of bantams is that when fully matured they shall weigh one-fifth as much as the standard fowls of corresponding name. Although this rule for size or weight is given, the smaller they can be bred and retain breed characters and the power of reproduction, the more valuable they will be. The danger that follows

minimum size is the difficulty experienced by pullets in their first laying period. Many of the smallest die in the effort to expel their eggs.

4. Classification.—A general classification that may be made of Bantam fowls is *Booted*, *Brahma*, *Cochin*, *Game*, *Japanese*, *Malay*, *Old-English Game*, *Polish*, *Rose-Comb*, *Sebright*, and *Silky* Bantams, and these are treated in this Section in alphabetical order. It is usual, in official Standards and other publications, to give the Game Bantam first. Other bantams are classified under the heading of Miscellaneous as follows: *Andalusian*, *Aseel*, *Frizzle*, *German*, *Langshan*, *Leghorn*, *Minorca*, *Nankin*, *Rumpless*, *Scotch Gray*, *Spanish*, *Sultan*, and *Yokohama*.

BOOTED BANTAM

5. The **Booted**, or **Feather-Legged, Bantam** was one of the earliest varieties. It was known as far back as the time of Albin, who stated in his writings that feather-legged bantams were becoming unpopular. The originals of this breed were crude in formation and sparingly feathered on the shanks and toes; some were tall and leggy in appearance, and others were very short and of a formation more like the Japanese than the Booted Bantam of the present. They were bred with muffs, with vulture hocks, and with both white and yellow shanks. The modern Booted Bantam was made by selecting the best offspring and mating them for form and plumage color.

6. Development.—For a long time Booted Bantams were bred without reference to form or color. Black, white, speckled black and white, speckled red, white whiskered, and Dutch bearded Booted Bantams were bred more or less to selection for feather, without effort to separate them into varieties. Later, all kinds were discarded except the white booted, with white shanks and beaks, and the black booted, with black shanks and beaks. Some of the white booted were bearded and some were not. When a standard was made for the Booted Ban-

tams, both white and yellow shanks were permitted, although white was preferred. Since 1883, a number of varieties have been bred, but only the White Booted Bantam is described in the American Standard. Both Black Booted and White Booted Bantams are described in the English Standard, and beards, or whiskers, as called in the English Standard, are permissible, the preference being for no beard.

7. Description.—Booted Bantams are bred in two distinct types; one having low carriage and short shanks somewhat like the Japanese type of fowls, but larger; the other having the upright carriage described in the American Standard. The peculiarities of the Booted Bantams are their compact body formation, with neck longer than the Cochin Bantam, tail rather full, carried upright, with sickles only an inch or two longer than the main tail feathers. The thighs are short and heavily feathered at the hock, the feathering frequently extending to the ground; the shanks are of medium length, very heavily feathered on the outside, with long, stiff feathers; the outer and middle toes have a growth of stiff feathers, which are unlike those on a Cochin Bantam, are fewer in number, and are long and very strong in quill. The feathering of the Booted Bantams is profuse, but not loose as in the Cochin Bantams. In some of the best specimens the shank and toe feathering, if spread on the palm of the hand, will almost cover it. In many specimens, however, the feathering is scant.

The plumage of the White Booted Bantam is pure white to the skin; the shanks, feet, and skin are also white. In the Black Booted Bantam the plumage is a rich glistening black; the shanks and feet also are black. In both varieties, the eyes, combs, face; wattles, and ear lobes are red. The comb is single, of good form, rather small, upright, and evenly serrated.

The cocks weigh from 26 to 30 ounces; the cockerels and hens, from 22 to 24 ounces; the pullets, from 20 to 22 ounces. Disqualifying weights are 28 ounces for cocks, 24 ounces for cockerels and hens, and 22 ounces for pullets. The modern type of Booted Bantam is shown in the color illustration.

8. Mating.—The best Booted Bantams that can be selected should be mated continuously, marked attention being given to the length of the booting; fowls with long, stiff leg and toe feathering should always be selected. The soft feathering suitable to the Cochin Bantam is not permissible on the Booted Bantam. In the White Booted Bantam, the plumage should be chalk white; the quills, white to the skin; the skin, beak, shanks, and toes, white. In the Black Booted Bantam, the plumage should be equal to that of the Langshan in brilliancy; the shanks and toes should be black; the beak, dark or horn color; the eyes, deep red; the breed formation as previously described.

BRAHMA BANTAM

ORIGIN AND CHARACTERS

9. The Brahma Bantam was made in England by intermingling Brahma, gray Aseel, and Cochin Bantams, and finally some dark-tailed Japanese Bantams. Offspring from these crosses were selected and mated, and this process was continued for many years until bantams were produced of Cochin form and of Light and Dark Brahma plumage colors. Some of these were brought to America and mated with both Light and Dark Brahma fowls, and after a series of years of mating and remating, the American type of Brahma Bantam was established.

There are two varieties of Brahma Bantam, the *Light Brahma* and the *Dark Brahma*, both of which conform to the general breed characters of the Brahma fowls. In America, the Brahma Bantam conforms in a general way to the large Brahma, and the same is true in England; but, in England, both the large Brahma and the Brahma Bantam is, in type, more like the Cochin than the American Brahma. They are more profusely feathered on hocks, shanks, and feet than those of America, and vulture hocks are not a disqualification. Those that have been brought from England to America are in type quite like the American Cochin Bantam.

DARK BRAHMA BANTAM

10. Origin.—The American type of **Dark Brahma Bantam** originated at Weston, New Jersey, from a Dark Brahma female mated with a Dark Brahma Bantam cockerel from England. Two cockerels of beautiful plumage color and average American Brahma type were produced the first year from the hen. The two cockerels were mated with about twenty hens and pullets of the English type of Dark Brahma Bantam. The hen was mated the second season with an English male; some chicks were hatched from these matings early in February, and more in March; the best of all the offspring from both matings were selected in the fall, remated in a large enclosure, and chicks were hatched from them in September and October; twenty-seven of these survived the winter, and from them was established the McGrew strain of Dark Brahma Bantam, which has been distributed throughout the United States and England.

11. Development.—The Dark Brahma Bantam was developed by intermingling the English strain of the Dark Brahma Bantam with the American Dark Brahma, and from the offspring selections were made for the purpose of improving type and color.

12. History.—The Dark Brahma Bantams were first bred in England, where they have been greatly improved in color and markings, but the shape preferred there is too much like that of the Cochin to be popular in America. Importations were made from England, and from them the American type of Dark Brahma Bantam was developed as described. Since that time, they have been distributed throughout the United States and Canada, and from them bantams having proper Brahma form and beautiful Dark Brahma color and markings have been bred.

13. Description.—The Dark Brahma Bantams should conform in shape, color, and markings to the description of the Dark Brahmas. They should have the carriage of the

Dark and Light Brahma Bantams

Brahmas, and not the low carriage of the Cochins; they should have soft, close-fitting hock plumage, and a plentiful supply of shank and toe feathering. The females should be of the same beautiful gray color described for the Dark Brahmas; the penciling of the feathers, as shown in Fig. 1, should be found in every portion of the plumage, including that of the shanks and toes.

FIG. 1

14. Mating.—The rules given for mating Dark Brahma fowls for producing exhibition males and females should be applied to the mating of Dark Brahma Bantams. Breed characters must have marked consideration in selecting the Bantams of this variety for breeding purposes. The strong tendency toward Cochin formation and stiff hock plumage must be bred out of them by selecting fowls perfect, or nearly perfect, in these respects. No tendency toward other than Brahma formation should be encouraged in the mating.

LIGHT BRAHMA BANTAM

15. Origin.—Perhaps the best strain of **Light Brahma Bantam** in America was made by intermingling the English type of Light Brahma Bantams with a small male and female selected from one of the oldest strains of the Light Brahma bred in Massachusetts. The result of the first year's mating was one cockerel of fine form and color, and two pullets of small size and beautiful markings. The pullets were mated to a male from England, and the cockerel was mated to two English hens and five English pullets. More than one hundred chicks were raised in one year from the later mating, and a few were raised from the two half-bred pullets. The best offspring from both matings were selected and mated in the fall of the same year; and in October, more than forty chicks were hatched from them, fourteen of which survived the win-

ter. From these, a strain of Light Brahma Bantams was established.

16. Development.—The Light Brahma Bantam has been developed by the bantam fanciers of England and America for the improvement of type and plumage color as preferred in the two countries.

17. History.—The Light Brahma Bantam was originated in England and in America as described. For a number of years but few of them were seen in America. Following 1895, they were sparingly distributed throughout the eastern part of the United States and in Canada. After the formation of the National Bantam Association of America, renewed interest was displayed in them. A standard was made to meet the requirements of the American type of Light Brahma Bantam, and for several years a number of them were bred, but since 1905 less interest has been shown in this variety.

18. Description.—The Light Brahma Bantam should conform in every way, size excepted, to the type of Light Brahma, as described in the American Standard. The chief defects found in bantams of this variety are Cochin breed characters, vulture hocks, and improper back and tail carriage. The early influence of Japanese bantams shows frequently in straight sickle feathers that are pointed at the end. Drooping wings and extended, stiff hock feathering are not proper characters of Brahma Bantams. They should have Brahma back and tail formation; the feathers should be profuse, soft, and round about the hocks, with no stiff plumage. The shanks and toes may be profusely feathered, but for beauty and Brahma finish, the shank and toe feathering should conform in color and markings to that of the larger Brahma. Their carriage should be upright and stately like the Brahma, not stooped like the Cochin.

The weight of cocks must not exceed 33 ounces; of cockerels and hens, 29 ounces; and of pullets, 27 ounces. One ounce heavier than these weights disqualifies them for exhibition; 3 ounces less than these weights is proper for them.

19. Mating.—For producing exhibition offspring, Light Brahma Bantams having form and color as described for the large Brahmas must be selected. If improper form and carriage prevail in the breeding stock, the same will be increased in the offspring. It is very difficult to breed Light Brahma Bantams of the accepted shape and color. But few of the best quality will come from well-selected matings, and only poor results can be expected from bantams of this variety that do not possess the proper breed characters, shape, and plumage color. The color and markings will be controlled in this variety the same as described for the large Brahmas.

COCHIN BANTAM

ORIGIN

20. The **Cochin Bantam** has become one of the most popular of all varieties of bantams, and it has been distributed into every section of the globe. Nankin bantams that had yellow plumage, blue shanks, and were sparingly feathered on shanks and toes are mentioned among the earliest of the small breeds of fowls. A Chinese legend said to have been written more than 1,000 years ago mentions a bridal present of a pair of diminutive fowls of a golden color, somewhat larger than doves, placed in an oval cage that was decorated with flowers of a golden hue. This may be accepted as evidence of the existence at that time of small yellow-plumaged fowls. The first Cochin Bantams came from China, and were of a dark cinnamon color. They were called Pekin Bantams and they frequently had greenish shanks and five toes. The same is true of the Nankin and Silky Bantams; the latter had blue shanks and five toes, and the former had greenish shanks and frequently five toes, which indicates that all may have had the same origin.

The first Pekin Bantams came from China into England about 1860, but they were not brought to America until 10 or 12 years later. For many years only the buff variety was

known; but later, other varieties were brought from China, and some varieties were made both in England and in America. There formerly existed a marked difference of opinion as to the shape, color, and feathering of the Cochin Bantams, the bantam breeders of England selecting one type and those of America another. When it was proved that as perfect shape and color could be bred in the Cochin Bantam as in the larger Cochin, Standard descriptions were changed, or rather their application was altered, and only Cochin Bantams having true Cochin form and plumage color were recognized.

The first Cochin Bantams that came from China were of the buff variety. For many years it was thought that this was the only kind known in China, but later black Cochin Bantams were brought to England. Mr. Entwisle states, relative to the buff variety: "Many years elapsed before Cochin Bantams of other color than buff were heard of, and by that time the buffs had almost died out and were in the hands of only one breeder. The new ones were black, badly marked with white or straw color in hackle and red in wings." It has been claimed that no new blood in Cochin Bantams was brought from China, and that all that were bred for 20 years came from the original pair of buffs. A cross with Nankin Bantams was made to invigorate them, and it is claimed that from this cross greenish color was bred into the shanks, and that five toes resulted in the same way; others claim that later importations from China had the same defects.

BLACK COCHIN BANTAM

21. Origin.—The **Black Cochin Bantam** was bred from fairly good-colored bantams that were brought from China.

22. Development.—The first Black Cochin Bantams that were brought into England from China had white on the surface and in the under plumage of the hackle; gray or white under plumage in the back; and in some the shanks and feet were yellow and in others dusky yellow. They have been developed by years of careful breeding into a variety having beautiful Cochin form and almost perfect plumage color.

Cochin Bantams

23. History.—The Black Cochin Bantam did not become popular until it had been improved in form and color. This was begun by the breeders of England, who bred the fowls to Cochin form with good surface color, but defective in color of under plumage. The American fanciers were the first to produce them with plumage that was black to the skin. With this came black or very dark shanks, and toes that are objectionable, as the American Standard requires the shanks and toes to be black, gradually shading into yellow, with the bottom of the feet yellow. Years of labor were given to further perfecting form and plumage color and a proper color of shanks and feet.

24. Description.—The Black Cochin Bantam should be of perfect Cochin form and profuse in feather; the plumage should be a rich glossy black throughout, with no foreign color; the shanks and toes, black, shading into yellow; the bottom of the feet, yellow; the beak, the same color as the shanks; the eyes, dark brown.

25. Mating.—The best Black Cochin Bantams that can be selected must be used for breeding. The form must be perfect and the plumage, including the quill and under plumage, must be black. The surface plumage should glisten with a brilliant finish that rivals the sheen of the Langshan. To prevent red appearing in the surface plumage, females with no sheen in the surface plumage should be used. The defects to be avoided are described in discussing the Buff Cochin Bantam. A great deal of attention should be given to the proper color of the shanks and toes; they should be shaded with yellow, and the soles of the feet should be yellow.

BUFF COCHIN BANTAM

26. Origin and Development.—The **Buff Cochin Bantam** was developed from buff-colored bantams that were taken from China to England. They were small, lacking in breed characters, narrow in tail formation, and deficient in plumage color. It has been claimed that but a single pair was

taken from Pekin to London; but a counter claim is made that more than these were taken to England and that some were taken to America also. The peculiarity of form and color of the early fowls led to a belief that there were many varieties of them in their original home. This theory has been substantiated by persons who saw numerous varieties in China prior to 1870. An early writer stated that, when in China, he saw as many colors of Cochins and Cochin Bantams as would be seen in mongrel flocks in America. Buff, however, seemed to be the predominating color.

27. The origin of Buff Cochin Bantams has been given previously, and it is necessary here only to tell of the origin of the present type. It was begun in England and finished in America. One of the most prominent bantam breeders of England said, after having received a shipment of Buff Cochin Bantams from America, that they were the first bantams of a uniform, even shade of buff throughout, with buff under plumage, that had ever been seen in England. Bantam breeders of England made them of fairly good Cochin type, and the bantam breeders of America greatly improved Cochin type and made the color of the surface and under plumage perfect.

28. History.—Cochin Bantams became so popular in the United States as to place them in advance of other breeds of bantams. More Buff Cochin Bantams were bred and shown in the 10 years following 1895 than any other variety of bantam. The first Buff Cochin Bantam males having an even shade of buff to match the color of the female were produced by crossing a Buff Cochin Bantam male with White Cochin Bantam females, and from the offspring of this cross a strain was established that produced males and females of one shade of color, which has now been made golden buff, the same as in all buff-colored fowls.

29. Description.—Buff Cochin Bantams should have the body formation and profuse feathering that are most desirable in Cochin fowls. This should be pronounced in all varieties, but especially so in the buff variety. The perfect rotundity of

form that is so much admired in the large Buff Cochin fowls should be carried out in every section of the Buff Cochin Bantams. The plumage of this variety should be golden buff throughout, as even as possible; the top color of males and the hackle of females should be glossed with a rich finish that gives these sections a darker appearance than the breast and body plumage; the under plumage should be buff, a shade or two lighter than the surface color. No white, black, or foreign color of any kind should appear in the surface or the under plumage. Profuse under fluff such as is shown in the feather in Fig. 2 is necessary to build out the plumage formation. There should be double the quantity of feather in the under fluff as in the web, and the color of the web should be so dense as to hide the lighter shade of color in the under plumage, thus avoiding a mealy appearance in the surface color. The shanks and the outer and middle toes should be covered with feathers; the quills of these feathers should be stronger in the males than in the females, but strong enough in both to make the kind of toe feathering shown in the color illustrations. Scant shank and toe feathering is a glaring defect, and a bare middle toe is a disqualification.

FIG. 2

The standard weights for all varieties of Cochin Bantams are the same: 30 ounces for cocks; 26 ounces for cockerels and hens, and 24 ounces for pullets. Four ounces heavier than these weights will disqualify.

30. Mating.—In selecting Buff Cochin Bantams, and in fact all varieties of Cochin Bantams, for mating, special attention must be given to the beauty of head formation and comb, as well as to perfectly shaped Cochin back. No division or split in the body and fluff formation is permissible. Where the lower part of the tail and body formation joins with the fluff feathering about the vent and thighs, and where the wing folds in between them, there is liable to be an open space or break

in the plumage. This is one of the most objectionable features in Cochin Bantams, and should be guarded against. The body, as viewed from the rear, should be as perfect in form and feather as when viewed from the front or the side. Each section of a Cochin Bantam must blend into the others; and to preserve such formation, it must be perfect in the breeding stock. To produce Buff Cochin Bantams requires the same process of mating that is described for Buff Cochin fowls.

PARTRIDGE COCHIN BANTAM

31. Cochin Bantams of many colors came from China. The first partridge-colored or brown-red fowls that came from there were unfinished in color and markings. The plumage of the males was like that of the original brown-red game fowls; the females were like poorly colored Brown Leghorn females. It has been claimed, but not proved, that such colors existed in Cochin Bantams in China. Males have been bred from early black Cochin Bantams, which had more or less red in the top color, and females mixed with brown and black came from the same matings. Whether or not there was originally partridge-colored plumage among them matters not, for the **Partridge Cochin Bantam,** as it now exists, was made in England and America.

32. Origin.—The Partridge Cochin Bantam was made in England by crossing black and buff Cochin Bantams, from which offspring of fairly good brown-red color resulted. These were selected and crossed with Partridge Cochin fowls, producing offspring of bantam size. In America, they were made by crossing English-bred Partridge Cochin Bantams with the Mitchell strain of Partridge Cochins, the offspring being of bantam size.

33. Development.—The Partridge Cochin Bantam has been developed in America to meet the color requirements of the American Standard. In England, it has been developed to meet the color demands of the Standard there, which describes a lighter shade of red in the males and in the body color of

females, with less striping on the males and a lighter shade of penciling in the females. The males that came from England had color and markings like the black-red game bantams, with striping in the hackle and saddle. The females had a gray-mahogany shade of body color, penciled with brown.

34. History.—Partridge Cochin Bantams were bred in England for a number of years before they were brought to America. Three of them were imported from England in 1897 and taken to Elmwood Farm, Weston, New Jersey, where they were cross-bred with Partridge Cochin fowls from the Mitchell strain. This strain has since been distributed among the most successful bantam breeders of America.

35. Description.—The Partridge Cochin Bantam must conform in shape, profuse feathering, color, and markings to the large Partridge Cochin. The Partridge Cochin Bantam has a more profuse feathering than any of the other Cochin Bantams. This has resulted from the crosses made with the Cochin fowls. Males of beautiful color and markings have been produced, as well as some females that equal their large ancestor in plumage color, but many of the latter show a grayish-brown tinge.

36. Mating.—The Partridge Cochin Bantams are usually mated for the production of males and females from a single pair. For this kind of mating, the best that can be selected for shape and color are mated to produce bantams of good form in both sexes, with fairly good color and markings. To be most successful with them, the same line of matings described for Partridge Cochin fowls must be followed.

WHITE COCHIN BANTAM

37. Origin.—Originally, some of the Buff Cochin Bantam females were so light in color as to be called cream colored. From them the start for the **White Cochin Bantam** was made. In America, some of the cream-colored buff variety were selected by A. P. Grove, of Philadelphia, who was

very successful with them. His efforts resulted in some that were white. Later, some very good white bantams were imported from England, and these, bred with the American product, produced White Cochin Bantams, which were bred with some beautiful White Cochin pullets weighing about 4 pounds. The same method of cross-mating was followed in England, and thus in both countries the White Cochin Bantam has been made.

38. Development.—After years of careful handling, the White Cochin Bantam was developed from the crude originals mentioned in connection with their origin. It has been developed into a Cochin Bantam that rivals other varieties in Cochin form and perfect plumage.

39. History.—The history of the White Cochin Bantam parallels that of the other varieties. Bantams of this variety were originated, developed, improved, and bred into Cochin type before their plumage color was perfected. Finally, they were crossed with Booted White Bantams to obtain pure white plumage. White shanks and toes resulted from this cross. White shanks were made a disqualification for them, and following this action, a return was quickly made to yellow shanks and beak, and they are now bred with beautiful form and proper color to conform to the standard for White Cochin fowls.

40. Description.—White Cochin Bantams must conform in shape and color to large White Cochin fowls. They must have perfect Cochin type, profuse feathering, plenty of fluff and cushion, yellow shanks and feet, beautiful heads, comb, wattles, and ear lobes, and bright-red and brilliant eyes. Beautifully formed head, comb, wattles, and ear lobes are necessities.

41. Mating.—In selecting White Cochin Bantams for breeding exhibition offspring, only those having perfect or nearly perfect Cochin form, with a profusion of feathers, chalk-white plumage, including the quill down to the skin, bright-red eyes, yellow beak, shanks, and toes, should be used. From no

other kind will anything like perfection be bred. White Cochin Bantams must be more nearly perfect in form and color than bantams of other varieties or they will not attract equal attention.

CUCKOO COCHIN BANTAM

42. Origin.—The **Cuckoo Cochin Bantam** made its appearance in many localities where both Black Cochin and White Cochin Bantams were bred. By intermingling these two varieties, the black-and-white Mottled and the Cuckoo varieties have been obtained.

43. Development.—The Cuckoo Cochin Bantam has been developed from offspring that were indifferently marked or colored like the Dominique fowls.

44. History.—One strain of Cuckoo Cochin Bantam was developed in America from some fairly well-marked offspring that came from cross-breeding a Cochin Bantam male that was half buff and half black with both Black Cochin and White Cochin Bantam females. Some of the offspring so produced resembled in color the Barred Plymouth Rocks. The best male and the best female from them were cross-bred with a pair of Cuckoo Cochin Bantams imported from England; the offspring were selected and remated, and, as the result of several years of breeding, Cuckoo Cochin Bantams were produced. They have never been recognized as a standard variety in America, but are so considered in England.

45. Description.—The Cuckoo Cochin Bantam should have Cochin Bantam shape and plumage color and markings like standard-bred Barred Plymouth Rocks. In all other respects it should resemble the Cochin Bantam.

46. Mating.—The best Cuckoo Cochin Bantams that can be selected must be mated for the production of offspring with Cochin Bantam form and Barred Plymouth Rock color. In general form, the Cuckoo Cochin Bantams are usually well proportioned and have good Cochin Bantam type. This they

have inherited from the other varieties, but the great difficulty with them is the production of good plumage color, which can be obtained only by following the rules for mating Barred Plymouth Rock fowls.

DEFECTS IN COCHIN BANTAMS

47. The principal defects that are likely to be found in Cochin Bantams are:

1. Long backs in the females. This is caused by a lack of profuse down, or under fluff, in the feathers. In Fig. 2 is shown a feather that is two-thirds down, or under fluff. Cochin Bantams that have feathers of this kind will have a large, round cushion, and this will give them the short back that is so desirable in fowls of this variety. The proper markings for the feathers of a Partridge Cochin Bantam are shown in the feather in Fig. 1.

2. Narrowness between the thighs. This gives the fowl a pinched appearance when viewed from the rear, and also causes the fowl to have a flat, narrow breast instead of a full, rounded one. This defect destroys the beauty of a Cochin Bantam.

3. The combination of too great length of shanks, erect carriage, and a long head. This gives a Cochin Bantam a crow-like appearance, which is a glaring defect.

4. A too great length of tail in either males or females. This should be corrected by selecting breeding fowls that are so profusely feathered with down and soft plumage as to soften the quills of the main tail feathers and form the round, curving tail formation in the males and the short growth of main tail feathers in the females, surrounded by fluff and cushion.

5. Badly colored plumage. This should be avoided in all varieties of Cochin Bantams.

GAME BANTAM

ORIGIN AND CARE

48. Of all the varieties of Bantams, none is more popular or more generally bred than the **Game Bantam.** Game Bantams are selected by the most expert fanciers, who breed them to a type that is more artificial than that of any fowl or bird, unless it is the English carrier pigeon or the crested canary. Although they miniature the modern type of exhibition game fowls, they are more attractive from the fact that they are so small, so delicately built, and so well trained for exhibition as to have the appearance, when in the show pen, of models posing rather than of fowls for exhibition. Game Bantams have, of necessity, been so closely inbred and line bred as to have made them more delicate, or rather more susceptible to weather conditions and changes, than other bantams. They must be comfortably housed during cold weather, and must at all times be protected from dampness. They cannot withstand the bad influence of damp houses or drafty and cold houses. Notwithstanding this, they are bred successfully in the oppressive climate of the tropics and in the coldest climates of the north.

49. Origin.—The original Game Bantams were produced by selecting and inbreeding the smallest game fowls, remating the offspring, hatching the chicks late in the fall, rearing them during the winter months, and then selecting the smallest so produced and mating them. Another method was mating the small game fowls so produced with the white bantams of early days, which were undoubtedly the originals from which the Rose-Comb Bantams were made. Messrs. Tegetmeier and Doyle state that the Game Bantams were made by inbreeding small game fowls and cross-mating them with white bantams.

A color illustration made by Harrison Weir about 1860 shows white and game bantams side by side. The females of both varieties are quite alike in shape, but they differ in plumage color, and the males of both varieties have the same general tail formation. The game bantams illustrated by Mr. Weir were referred to by Mr. Tegetmeier when he stated that a small game cock was crossed with a Bantam hen. From this cross, offspring of small size were obtained, but the game bantam type was lost and was regained only by careful breeding. Mr. Entwisle credits John Crosland, of Wakefield, England, with the earliest production of Game Bantams.

The modern type of Game Bantam of all varieties has been produced in much the same manner as the modern type of exhibition game fowls. Their history has been told in that of the game fowls, and need not be repeated here.

50. Game Bantams have been bred in every variety color known to game fowls. Since descriptive standards for them have been issued by clubs and associations, they have been modeled in accordance with such Standard descriptions, and only varieties mentioned in these Standards have been bred to any extent during recent years. White and Black Game

FIG. 3

Bantams are mentioned in the American Standard but not in the English Standard. These two varieties are, however, recognized in the English Standard for Old-English Game Bantams.

According to the English Standard, Game Bantam males are admitted to competition at 22 ounces, females at 20 ounces;

males of the Old-English Game type at from 18 to 22 ounces, females at from 16 to 20 ounces. Game Bantams are admitted to competition by the American Standard at 22 ounces for cocks, 20 ounces for cockerels and hens, and 18 ounces for pullets; 4 ounces in excess of these weights will disqualify them.

FIG. 4

51. Care.—To protect Game Bantams from cold, they should be kept in well-built houses that have a perfectly dry interior, and if the weather is likely to be very cold they should be provided with hooded roosts. The hooded roost shown in Fig. 3 is suitable for this purpose. This hooded roost is made from a light packing case; it is 18 inches high, 2 feet wide, and may be 3 or 4 feet long. When the temperature of the outside air goes below 10° F. above zero, the cotton or burlap curtain attached to the front of the hooded roost should be dropped over the opening in the front of the box; this will provide ample protection during the coldest weather. There should be suffi-

cient spaces between the meshes of the cloth in the curtain to admit of the passage of fresh air into the box, because if Game Bantams are shut up too tightly they may smother, even in the coldest weather.

Game Bantams should not be exposed to outside weather conditions during cold, or even cool, weather, or when it rains or snows. Houses for them should be built with a connected shelter or roofed runway covered on the sides with galvanized-wire netting, such as is shown in Fig. 4. The meshes of the wire netting should be small enough so that it will be impossible for a mouse to go through it. Such a netting will protect both the old and the young bantams from enemies of all kinds. During cold or stormy weather, an additional shelter of cotton cloth may be fastened down on the inside of the wire netting. This will protect the bantams from wind, snow, or rain, and yet will admit enough light for them to see to scratch about in the litter inside on the floor.

BIRCHEN GAME BANTAM

52. Origin.—The **Birchen Game Bantam** was made by crossing Brown-Red and Silver Duckwing Game Bantams and by selecting for breeding purposes the offspring showing the nearest approach to the color and markings desired, and continuing to remate them from year to year until they attained a quality fully equal to that of the large fowls of the same variety.

53. Development.—The Birchen Game Bantams have been gradually developed into a variety that will breed almost true to plumage color.

54. History.—The Birchen Game Bantams, like the larger fowls of the same color, have never been so plentifully bred nor have they become so popular as bantams of other varieties. These Bantams are not easily bred and controlled within the color and markings required for them. Although they are frequently exhibited at the larger poultry shows, they are seldom seen at the smaller ones.

Game Bantams

55. Description.—It must be remembered that all varieties of Game Bantam must have the same breed characters. The proper type and variety colors for them are shown in the color illustrations. The ground color of the Birchen Game Bantam is black; the top color and markings of the male are silvery white; the breast feathers, on both the males and females, are laced with white; this lacing should not extend below the thighs; the hackle of both males and females is the same color, lightly striped with black; the eyes of both sexes are black; the head and its attachments are dark purple or gypsy color; the beak, shanks, and toes are very dark or black; the sickle feathers of the male are very fine and glisten with sheen.

56. Mating.—The methods of mating Birchen Game fowls, told in connection with the discussion of that variety, should be applied to the Birchen Game Bantams. In mating bantams of this variety, special attention must be given to selecting for perfect Game Bantam type, and to have the top color in males a clear, silvery white. Both males and females must have hackles of the same color, as free from striping as possible, and, when striped, they should be lightly marked with a fine black line running down the center almost to the point of the feather. If only the lower feathers of the hackles of the breeders are so marked, the offspring will be more attractive. The body color of the parent stock should be black, the lacing on the breast feathers, a fine or narrow line, the white gradually running out until it disappears at the juncture of the legs and the breast. The lacing is likely to increase in successive generations, and when too much of this occurs, males having little or no white below the shoulders can be used in the matings. It must be understood that the two colors of the Birchen Game Bantam are black and white. Lemon and black belong to the Brown-Red Game Bantam, and the distinction between these two varieties should be nearly as perfect as can be drawn between white and lemon or straw color.

BLACK GAME BANTAM

57. Origin.—The first **Black Game Bantam** fowls of proper form and color that were produced in the United States were made from black or very dark offspring from both Birchen and Brown-Red Game Bantams. They have been made elsewhere in much the same manner.

58. Development.—The development of the Black Game Bantams has come through a careful selection of the best offspring from the originals, mated afterwards for form and color.

59. History.—Black Game Bantams were first shown in America, and there accepted as a Standard variety. They have been much improved since, and some have been shown that were the equal of other varieties.

60. Description.—The Black Game Bantams must have the same type and breed characters as other Game Bantams. The plumage is glossy black throughout; the beak, shanks, and toes are black; the eyes are nearly as dark as those of the Birchen Game Bantam; the face, wattles, and ear lobes are dark red.

61. Mating.—To succeed with the breeding of the Black Game Bantam, unusual care and attention must be given to selecting breeders of proper size and Game Bantam type; rich, glossy plumage having considerable sheen; beaks, shanks, and toes very smooth, and glistening black, if possible. The difficulty in breeding these fowls is to avoid a tendency toward black-red in the plumage. To prevent this, females with grayish-black plumage should be used occasionally in the matings. Males with rich glossy black plumage, dark under plumage, dark eyes, and smooth, glossy black beak, shanks, and toes, may be mated to females less brilliant in plumage, one or more of them having the grayish-black tinge. Males without sheen may be mated to females that have rich glossy black plumage, shanks, and toes.

BLACK-BREASTED RED GAME BANTAM

62. Origin.—The **Black-Breasted Red Game Bantam** was made by breeding down from the larger type of modern exhibition game fowls. This was accomplished by crossing game bantams of the earlier type with very small males selected from the modern type of exhibition game fowls and by then mating the smallest females of both the early and the modern type of Game Bantam with small black-red Malay Bantam males.

63. Development.—The Black-Breasted Red Game Bantam was made by a process of development carried on by expert bantam breeders. They were produced by selecting the best of the variety and mating and remating for type and color without the introduction of blood from any other variety. Black-Red game color cannot be improved through the introduction of any other variety color. Black-Breasted Red Game Bantams are the foundation stock from which all varieties of Game Bantams have been made, and they can be improved only by selection.

64. History.—The history of the Black-Breasted Red Game Bantam covers a century. It had its beginning in small fowls much like Rose-Comb Bantams in shape, the females colored and marked like the Brown Leghorn and the males colored like the Black-Breasted Red Game. From time to time improvement has been made in them in much the same degree as in the large game fowls. The improvement of the latter is illustrated in *Game Fowls*. The interesting part of the history of the Black-Breasted Red Game Bantam begins about 1890, when they had been developed into miniature fowls having all the breed characters of their large ancestors, and, if possible, more beautiful color and markings. Since that time no other bantam has been so popular as the Black-Breasted Red Game.

65. Description.—The Black-Breasted Red Game Bantam is accepted as the model for type in all varieties. In the

color illustration, which was drawn from life, are shown Black-Breasted Red Game Bantams and Duckwing Game Bantams that have won at the Game Bantam Club shows of America; they illustrate, therefore, Game Bantam type and color as defined by experts. The other varieties have been modeled to conform to them.

66. Mating.—In selecting breeders for the production of Black-Breasted Red Game Bantams for exhibition, special attention should be given to type, which must conform to that of the large exhibition game fowls. This type is the same in all Game Bantams, and is shown in the color illustrations. The special features of importance to be considered when selecting Black-Breasted Red Game Bantam breeding fowls are the position of the legs, which should be well forwards, and the length of leg from the body to the hock joint, which should exceed that of the shank from the hock joint to the ground. Frequently the reverse is true, but the greater beauty comes with more length above the hock joint than below. The wings should be carried as shown in the color illustration. The shoulders should be broad and prominent; the back should slope away and become narrow at its juncture with the tail; the tail should be gathered close together and be no larger than a lead pencil at the end; the sickles, very fine and delicate; the abdomen well cut up so as to have the Game Bantam type or under-body formation, as shown in the color illustration. The tail of the female should be set high and have the appearance of being a part or a continuation of the back. Although these features might be included in the description of this variety, they have been omitted there and mentioned under the heading of mating because they are not part of any Standard description. It is better to state them here than to confuse Standard descriptions with the breeder's art in the selection of fowls for matings.

The special features and general directions mentioned in connection with the mating of Black-Breasted Red Game fowls should be applied to the matings for the production of exhibition offspring of this variety.

Ducking, Pyle, and White Game Bantams

BROWN-RED GAME BANTAM

67. Origin.—The origin of the **Brown-Red Game Bantam** is identical with that of the larger type of fowls of the same variety. The reduction in size was accomplished in the same way as with other varieties of Game Bantam.

68. History.—The Brown-Red Game Bantam became popular when it was first shown with type, station, carriage, and color equal to the Brown-Red Game fowl. For a few years its popularity continued, but of late it has waned. It is a fancier's fowl and difficult to breed.

69. Description.—The Brown-Red Game Bantam has the same type as other Game Bantams. In color, it should be lemon and black; the top color should be lemon where red exists in the Black-Breasted Red Game Bantam, and black where black exists in that variety. The breast and body color should be black; the throat and breast plumage, laced with lemon; the hackle, lemon of a darker shade in the male than in the female, frequently cream color in the female, the center of the hackle feathers, in both males and females, lightly striped with black. The color description of this variety of bantams to accord with the demands of both the English and the American Standard will be found in the discussion of the Brown-Red Game fowls, and is further portrayed in the color illustration.

70. Mating.—The rules for mating Brown-Red Game fowls should be followed in the mating of Brown-Red Game Bantams. Those selected for the matings must have delicate color and markings.

DUCKWING GAME BANTAM

71. The **Duckwing Game Bantam** conforms so closely to the large Duckwing Game fowls, in respect to origin, development, history, and description, that there is no need to repeat the information here. It should, however, be borne in mind that the Duckwing Game Bantam must have Duckwing Game

characters, bantam size, and, if possible, color and markings more delicate than in the larger fowls.

72. Mating.—Full directions for mating both Golden and Silver Duckwing Game fowls are given in connection with those varieties, and these directions may be followed in the mating of Duckwing Game Bantams. The colors of the two varieties of Duckwing Game Bantams are produced in the same way as these variety colors are produced in the large Duckwing Game fowls, but great care should be taken to select those with more delicate shades than seems possible to secure in the larger fowls. When a Silver Wheaten Game Bantam female can be secured and mated with a delicately marked Black-Breasted Red Game Bantam cockerel, beautiful Duckwing Game Bantams can be bred from them. The Wheaten is used to strengthen the color in both the golden and the silver varieties. Most persons who breed Duckwing Game Bantams will be satisfied with matings of pure-bred Silver Duckwing Game Bantams and pure-bred Golden Duckwing Game Bantams for producing the two varieties, but for the production of the most delicate tints in these varieties, the matings mentioned for the large Duckwing Game fowls and the use of Wheaten females can be resorted to.

RED PYLE GAME BANTAM

73. In origin, development, and history the **Red Pyle Game Bantam** conforms to the large Red Pyle Game fowl. The only difference is in the size and the finer development which naturally belongs to the Game Bantam. Formerly, they had dark-colored beaks, shanks, and feet. This has been bred out of them, and since then they have become very popular in the United States as well as in England. Some of the best that have been bred were produced in America.

74. Description.—The Red Pyle Game Bantam is fully the equal of the Black-Breasted Red Game Bantam. Its form and color is quite attractive. The beautiful white body color

of the male, with color markings of red, is a beautiful combination of colors for a Game Bantam. The breast, body and tail plumage of the male is white. The red markings of the Pyle Game Bantam male are identical with the red markings of the Black-Breasted Red Game Bantam male. The Pyle female has pure white body color, with breast markings of salmon; the neck hackle is white, the feathers edged with gold; the face, wattles, ear lobes, and eyes, of both male and female, are bright red; the beak, shanks, and toes are yellow.

75. Mating.—The detailed description for the mating of Red Pyle Game fowls applies with equal force to the mating of Red Pyle Game Bantams. The most beautiful of the Red Pyle Game Bantams should be selected for the matings. The richest colors permissible in the exhibition pen, in both males and females, should be selected for breeding cockerels. Less brilliantly colored males will answer best for the production of females. The most delicately colored Black-Breasted Red Game Bantam males may be bred with Pyle females for the improvement of color. Males having yellow shanks and toes should be selected if possible. The yellow color of these sections indicates a previous cross with the Pyle variety.

WHITE GAME BANTAM

76. Origin.—The **White Game Bantam** was made from white offspring of Pyle and other Game Bantams.

77. Development.—The development of the White Game Bantam has been toward the improvement of color of plumage, beak, shanks, and toes and the maintenance of proper type.

78. History.—About 1900, the first White Game Bantams worthy of the name were shown. These had perfect type, but their plumage was spotted with black and the shanks were dark or willow colored. They were improved afterwards, and within a few years thereafter some having better quality were shown.

79. Description.—To have quality that will attract attention, White Game Bantams must be more nearly perfect than bantams of other varieties. To conform to such requirements it is necessary to use breeding stock of perfect form, pure white plumage, and carriage and general make-up fully equal to fowls of any other variety.

WHEATEN GAME BANTAM

80. Wheaten females are produced in Game Bantams the same as in large game fowls. They are of the same variety colors, and are almost perfect in form and color. They are useful in breeding Duckwings, the lightest shade of Silver Wheaten being used for breeding the lightest shades in Duckwings, and the darker shades for breeding the Golden Duckwings.

JAPANESE BANTAM

81. Japanese Bantams were taken to England from Japan about 1860. The first that came were of the variety now called the Black-Tailed White Japanese Bantam. Later, other varieties were brought and distributed throughout England and America. Solid-colored black, and solid-colored white, silver and golden duckwings, gray, buff, and splashed Japanese Bantams have all been brought from Japan at different times. These were not so distinctly separated by color into varieties as to come actually within the scope of the names applied to them, yet they had the color and markings from which such varieties have been made. The varieties of Japanese Bantams recognized in the American Standard are the Black, the Black-Tailed White, and the White. In addition to these, the English Standard describes the Buff, the Cuckoo, the Gray, and the Speckled Japanese Bantam.

82. Origin.—All varieties of Japanese Bantams originated in the country for which they are named. They came in many indistinct variety colors, the most pronounced of which

YOKOHAMA AND JAPANESE BANTAMS

were the black and the white. Other colors were brown, gray, splashed, and yellow, such as would naturally come from promiscuous breeding.

83. Development.—The bantam fanciers of England did most to develop and separate the Japanese Bantams into varieties. The first to be developed was the Black-Tailed White Japanese Bantam, which has continued to hold the most prominent place among them. Solid-colored Black and solid-colored White Japanese Bantams were next developed into variety distinctions that made them popular; and then the other varieties were sparingly developed. None has become so popular as the Black-Tailed White Japanese Bantam, or has been bred to equal this variety in quality.

84. History.—Japanese Bantams were first taken to England about 1860, and some years later they were imported into America. The Black-Tailed White Japanese Bantam was described in the original American Standard of 1875, and both the Black and the White Japanese Bantam is mentioned in the American Standard of 1894. Since their admission to the Standard, these three varieties have been considerably bred and greatly improved by bantam fanciers of the United States and Canada. Some unique bantams have been produced by promiscuous crossing of varieties.

85. Description of Shape.—When mentioned by the earliest writers, the Japanese Bantams were called Creepers, and were said to have legs so short as to give them the appearance of sliding along on their wing flights, which seemed to serve as runners. This description might be applied with some degree of accuracy to the females, as the bodies of some of them seem to rest on the ground as they move about. The males carry their heads and breasts upright rather than down and forwards. The head and comb of a Japanese Bantam are larger in proportion than the same parts in other bantams; the head is round and rather broad; the beak is strong and curved; the eyes, large; the comb, of more than average size for bantams, single, straight on the head, and evenly serrated. In all varieties, the beak, shanks, and feet are yellow.

The neck is short and carried back more than forwards; the body is short, round, and compact; the breast, prominent and full, and carried forwards. The back is very short, which is due to the fact that the head and tail come almost together when the fowl stands erect. The wings are unusually large and long for the size of the fowl, and are carried low, the points or ends extending back of the body, and frequently the lower part of the wings touch the ground. The tails of both males and females are large and carried erect, the forward feathers reaching the head. The sickle feathers of the male are long, tapering to a point, and but slightly curved. These are called sword feathers, because they are shaped more like a sword than a sickle. The legs are very short; the shanks and toes are smooth and shiny. Both males and females are profusely feathered, the hackles being unusually long for a bantam, and the saddle plumage of the male very profuse.

The standard weight for Japanese Bantam cocks is 26 ounces; for cockerels and hens, 22 ounces; and for pullets, 20 ounces. Four ounces in excess of these weights will disqualify them. The shape and carriage of the Japanese Bantams are well portrayed in the color illustrations.

86. Description of Variety Colors.—The **Black Japanese Bantam** has the beak, shanks, and toes yellow or yellow shaded with black; the eyes, comb, face, wattles, and ear lobes are red. The plumage is lustrous black throughout.

The **Black-Tailed White Japanese Bantam** has yellow beaks, shanks, and toes, and bright-red eyes, comb, face, wattles, and ear lobes. The plumage of both males and females is white, with black markings; the primaries are slate or black, edged with white; the secondaries are of the same color and markings as the primaries, except that they have a wide edge of white on the upper web, and, when the wings are folded, the black does not show. The main tail feathers of both males and females are black; the sickles and coverts of the male are black, edged with white; the coverts of the females are white, some marked with slate color or black. The rest of the plumage of both males and females is white.

The **White Japanese Bantam** has head points, shanks, and feet of the same color as the Black-Tailed White Japanese Bantam, and its plumage is pure white throughout.

The non-standard Japanese Bantam varieties are the Buff, the Gray, and the Speckled, or Spangled.

The **Buff Japanese Bantam** should have the same color in the head points, shanks, and feet as the Black-Tailed White Japanese Bantam. The plumage should be buff throughout, but is usually marked with more or less slate color or black in the flights, secondaries, and tail feathers.

The **Gray Japanese Bantam** might be separated into two varieties, the Birchen and the Brown-Red, as they correspond in color to these varieties of game fowls. These variety colors are shown in the color illustration of the Japanese Bantams.

The **Speckled, or Spangled, Japanese Bantam** is mixed with black and white and reddish brown and white. The colors and markings are more like those of the Ancona than of any other fowl, the ground color in one being black splashed with white, and in the other reddish brown splashed with white or straw color.

87. Mating.—Unless the Japanese Bantams selected for breeding purposes are perfect or nearly so in shape and feather, they are apt to fail in the production of exhibition offspring. It is equally essential that they should have color and markings that are almost perfect. The type best suited for the production of good offspring is shown in the color illustration of Japanese Bantams.

In mating for the production of Black Japanese Bantams, the head points must be perfect; the beaks, shanks, and toes as nearly perfect as possible; plumage, a rich glossy black, with very dark under plumage; carriage, low, with body close to the ground.

Unusual care must be given to the selection of the Black-Tailed White Japanese Bantams for breeding purposes. The features of prime importance are perfect tail formation, profuse sickles and tail coverts, each feather being laced with white. The black and the white in the wings must be well separated,

and the more intense the black, the more likely the fowls are to produce good color markings. The wing markings and main tail feathers of the females should conform to those in the males, with the exception that the wings need not be so dark. If the tail coverts of the females are white throughout, with no dark markings, better surface color will appear in the offspring. The breeding stock must be low set and have yellow beaks, shanks, and toes. Head and tail should be carried erect and the wings carried close to the ground.

Japanese Bantams mated to produce the white variety must be excellent in breed characters and have pure white plumage throughout. They must have clear, bright-red eyes, and golden-yellow beaks, shanks, and toes, free from dark markings.

Buff Japanese Bantams should be selected from the best that can be bred. So little progress has been made with them that a strain must be established by carefully selecting the best and breeding them, and again selecting from their offspring and continuing to mate and breed until perfect Japanese Bantam breed characters and buff color have been established.

Birchen and brown-red color have been produced in Japanese Bantams by mating grays with blacks. From such matings offspring have been produced with dark body color, some males and some females being laced about the breast with light gray or straw color; the top color of some males was gray, and of others straw color or yellow, and the breasts were laced to conform to the top color. Birchen and brown-red variety colors can be established in the same way as in game and game bantams. From the promiscuous matings of white, gray, and yellow Japanese Bantams, variety colors without distinction will be produced.

88. **Frizzle Japanese Bantams.**—The original **Frizzle Bantams** were brought from Japan with the early importations of Japanese Bantams. They were in form like the Japanese Bantams but had feathers like the Frizzle fowls. They are mentioned as having the same variety colors as were common with the Japanese Bantams. They had the same general

characters and tail formation that belong exclusively to the Japanese Bantam. Mr. Entwisle mentions that he has seen them of almost all variety colors seen on Cochin and Japanese Bantams. The Frizzle variety has been so neglected as to have been almost lost sight of. The few specimens that do exist are of inferior quality.

MALAY BANTAM

89. The **Malay Bantam** conforms in type and color to the large Malay fowls. When bred of the most delicate type, Malay Bantams are more slender in form and taller on the legs than the Game Bantams. Those that have been bred in America are too bulky in body formation to be considered with the more delicate type bred in England. The Black-Breasted Red Malay Bantam is the only variety recognized in the American Standard, but many other varieties are mentioned in the Malay Bantam Club Standard of England.

90. Origin.—The Malay Bantams were made by intermingling Malay fowls with Aseels, Indian Games, and Game Bantams. The best that could be produced were selected and inbred to reduce their size.

91. Development.—Following their origin, the Malay Bantams were developed into their present form and were reduced to bantam size by inbreeding.

92. History.—The first Malay Bantams were made by Mr. Entwisle, of England. Later the Malay Bantam Club of England was formed and by careful breeding the bantams have been produced of many variety colors and of perfect Malay type.

93. Description of Shape.—The following description of Malay Bantams is taken from the Malay Bantam Club Standard of England. In the males, the beak is strong and curved downwards; the comb is small, set well forwards, shaped like a half walnut, and as free from irregularities as

possible; the skull is broad, with deep-set eyes and overhanging brows; the profile of the skull and beak approaches the shape of a segment of a circle; the wattles and ear lobes are small, the bare skin extending down on to the neck, which is long and carried well upright, with a slight curve; the hackle is scant except at the base of the skull. The body is very wide and square at the shoulders and tapers to the tail; the shoulders are prominent, carried well up, and are usually bare of feathers at the points; the back is sloping and convex in outline; the saddle is narrow and drooping; the feathers, hard, short, and scant; the breast, deep and full, usually bare at the breastbone. The thighs are long and muscular, with but little feathering, leaving the hock exposed; the shanks, long and evenly scaled, flat at the hocks, and gradually rounding to the point where the spurs are set on; a downward curve in the spurs is preferred; the toes are long and straight, the back toe being close to the ground. The tail is drooping but the feathers in it are not carried close together; the sickles are narrow and slightly curved.

The females should resemble the males in type and station, except that the tail should be carried horizontally and formed much like the tail of Game Bantam females. The flesh of all Malay Bantams is hard and firm to the touch; their plumage is hard and lustrous, and their general appearance tall and gaunt; they are tall in front and drooping in the rear; they have an erect carriage—the position as erect as possible at the hock.

The Standard weights in England for exhibition Malay Bantams are: Cocks, $3\frac{1}{2}$ pounds; cockerels and hens, 3 pounds; pullets, 2 pounds. In America, the weights are: Cocks, 26 ounces; cockerels and hens, 24 ounces; pullets, 22 ounces; 4 ounces more than this in each will disqualify. Such small size is rarely if ever attained.

94. Description of Variety Colors.—All varieties of Malay Bantams with the colors of the large Malay fowls—Red, White, Black, Pyle, and Spangled—are recognized by the Malay Club Standard.

In the Red and Spangled Malay Bantam, the beak should be yellow or brownish—yellow preferred; in the Black Malay

Bantam, yellow or blackish—yellow preferred; in the White and the Pyle Malay Bantam, yellow. In all Malay Bantams, the comb, face, throat, wattles, and ear lobes should be bright red; the eyes, pearl white daw (with a greenish shade) or yellow, but the lighter in color the better, a red tinge being very objectionable; the shanks, rich yellow, though in the Black Malay Bantam, a slight duskiness may be overlooked.

In the Red Malay Bantam males the breast and underbody plumage is lustrous black; the hackle, saddle, back, and wing bows, rich red; the wing bars, black; the secondaries, bright bay; the flights, black on the inner web, with red edging on outside; the tail, green black. Females of this variety may be of any shade of cinnamon or wheaten, preferably with a purplish hackle; those with partridge markings, clay color, and golden hackle are also allowable. In fowls of all these shades, black is found in the flights and tail.

In the White Malay Bantam, both males and females have pure white plumage throughout, free from yellow, black, or ruddy feathers.

In the Black Malay Bantam, both males and females have glossy black plumage throughout, with brilliant green and purple luster, green predominant, free from any brassy or white feathers.

In the Pyle Malay Bantam, the males are similar to the males of the red variety in markings and color, except that they are creamy white where the others are black. The female has golden hackles; the breast is a salmon color; the remainder of the plumage is creamy white.

In the Spangled Malay Bantam, both males and females have ground color much like that of the Red Malay Bantam, except that in the males an admixture of red and white with the black of the breast, under parts, thighs, and tail is desirable. The color of the female should be rich chestnut, boldly marbled with black and white. Each feather in both males and females should somewhat resemble tortoise shell in the blending of the red or chestnut with sheeny black, and should have a white tip or spangle; even the long feathers of the tail and wings should be as tricolored as possible.

There are also Wheaten-Pyle Malay Bantam females that resemble Wheaten-Red Game females in every respect except that the flight and tail feathers are creamy white instead of black. The Wheaten-Spangled Malay Bantam female resembles the Wheaten-Red Malay Bantam females, with the addition of a plentiful powdering of white spangles. These wheaten females are not attractive, but they produce beautiful males.

95. Mating.—The mating of Malay Bantams for the production of exhibition quality requires that the parent fowls shall be carefully selected for size, shape, and variety color. True-colored fowls should be mated according to the variety color requirements for males and females.

OLD-ENGLISH GAME BANTAM

96. The English Standard contains a description of many varieties of Old-English Game fowls and recognizes bantams of the same varieties. It states that the general characters of the **Old-English Game Bantam** are similar to those of the large fowls of the same breed. The weight of males is given as from 18 to 22 ounces; of females, as from 16 to 20 ounces. None of the Old-English Game Bantam varieties are mentioned in the American Standard; one or two varieties have been shown in America, but the Spangled Old-English Game Bantam is the only one that has been bred to any extent.

97. Origin.—Bantams of the Old-English Game type were made by breeding down from the large Old-English Game fowls. Many varieties were bred; those most popular in England are the spangled and the black-red. For novelty in color, the blue-red takes first place. The black-reds have color and markings the same as the Black-Breasted Red Game; the Blue-Reds have a bluish tint marked with red. The spangled is the only variety that has been bred to any extent in America. This variety was made from the Spangled Old-English Game, which is among the most beautiful plumaged of all the game fowls.

98. Development.—The Old-English Game Bantams were originated, developed, and improved in England, where they have been bred to a set type of form and color.

99. History.—Old-English Game Bantams having the breed characters of Pit Game fowls have been bred for almost a century. Prior to 1900, there was so little of distinctive character in them that they were eliminated from Standard consideration. Since that time they have been so improved by the fanciers of England as to warrant their recognition by the Game Club of England.

100. Description.—All variety colors that are bred in the larger fowls are bred or recognized among the possibilities of Old-English Game Bantam fowls. To describe all the varieties would be a repetition of what has already been said under Old-English Game fowls. Spangled Game Bantams have become fairly popular in America. They are bred in several shades. In both males and females, the beak, shanks, and toes should conform in color; the eyes should be red or light-colored like the Aseel; the face, bright red; the plumage may be black, red, blue, or buff spangled with white, the spangling as even as possible. In all varieties, the tail should be black and white. Some of the most beautiful resemble the Jubilee Orpingtons in plumage; others are mottled black and white, but are not so attractive as the red, blue, or buff spangled varieties. Full information relative to other variety colors will be found in the description of Old-English Game fowls.

101. Mating.—To succeed in producing any variety of Old-English Game Bantams requires careful selection of perfect type and variety colors. Males and females having the same color of eyes, beaks, shanks, feet, and plumage should be mated. This rule should be followed in every variety, for in no other way can a line of breeding be established that will produce offspring of the same color as the parents.

POLISH BANTAM

102. From time to time, new varieties of miniature Polish fowls have been produced. Some of them have been much too large to be considered as bantams, yet their beautiful form and attractive colors have always gained the highest praise and more or less public attention. Mr. Entwisle was the most successful producer of these in England, and F. B. Zimmer, of New York, in America. The White and the Buff Laced Polish Bantam are the two varieties that have been made and accepted in America as standard. The English Standard admits, as worthy of consideration, all Polish Bantams that conform to the breed characters and colors of the large Polish fowls.

103. Origin.—The Polish Bantams were made by crossing Polish males with bantam females.

The **White-Crested Black Polish Bantam** was produced by mating Polish males of the large variety with Black Rose-Comb Bantam females.

The **Buff Laced Polish Bantam** and the **Golden Polish Bantam** was produced by crossing Golden Spangled Polish males with Golden Sebright Bantam females, and selecting the best for making Golden Laced Polish Bantams. Such as were indifferently marked were mated with very small Buff Laced Polish fowls.

The **Silver Laced Polish Bantam** was made by crossing Silver Laced Polish males with Silver Laced Sebright Bantam females.

The **White Polish Bantam** was made by crossing White Polish males with White Rose-Comb Bantam females.

Thus it will be seen that all varieties of Polish Bantams were originally made by crossing the several varieties of Polish, selecting small males with large crests and mating them with Rose-Comb Bantam and Sebright Bantam females; the product of these several crosses were selected and remated, and this

Polish Bantams

was continued until bantams of all variety colors known in Polish fowls were produced. Trouble was experienced in getting rid of the comb in the Polish Bantams.

F. B. Zimmer, who made the Bearded White-Crested White Polish Bantams in America, began with some Non-Bearded White Polish Bantams that originated by accident in Massachusetts. He mated a White-Crested White Polish fowl with them, and bred them down until he had Bearded White Polish Bantams with V-shaped combs, and shanks and toes of a bluish shade.

104. Development.—The Polish Bantams, with the exception of the white variety, have been so sparingly bred throughout the world as to make it almost impossible to tell of any development in them, other than as stated in the account of their origin.

105. History.—About 1883, several varieties of Polish Bantams were mentioned, and the same year one variety, the White-Crested White Polish, was included in the American Standard. This bantam was described as having a single comb, and a large, abundant crest, with no beard. In the American Standard of 1900, White-Crested and Buff Laced Polish Bantams are mentioned, both having single combs, or leaf combs. In the White-Crested Non-Bearded Polish Bantams, the shanks and feet are white; in the White Bearded and the Buff Laced Polish Bantams, the shanks and feet are blue or slaty blue. In the Standard of 1905, the combs of Polish Bantams are described as very small and V shaped; the shanks and toes, as blue or slaty blue in all varieties. Since the issuing of that Standard, Buff Laced Polish Bantams have been seen but seldom, and but few White-Crested White Polish Bantams have been shown.

106. Description.—All varieties of Polish Bantams, whether bearded or non-bearded, must conform in a general way to the shape and color description of the Polish fowls. Polish Bantams must be small and perfect in breed characters and plumage color. The weights of Polish Bantams are:

Cocks, 26 ounces; cockerels and hens, 22 ounces; pullets, 20 ounces; 4 ounces more than these weights will disqualify.

107. Mating.—The same general rules that are given for mating Polish fowls of all varieties must be applied to the matings of Polish Bantams, and the breeder must always have in mind the fact that the bantams must equal the large fowls in crest, beard, and plumage color. In addition to this, they must be small. Whenever they exceed disqualifying weights, they should be discarded as bantams. The best method of controlling size is to hatch only from mature hens that do not exceed the limit of weight, and are smaller if possible. These hens should be mated with males of the same variety that are small and perfect in all qualities that are most desirable in Polish fowls.

ROSE-COMB BANTAM

ORIGIN

108. The original bantams from which the **Rose-Comb Bantam** is said to have come were known as Black Bantams and White Bantams long before poultry literature began to appear. They are said to have existed both with and without feathers on their shanks, and were, perhaps, of the same blood as the Hamburgs. They are frequently mentioned by the earliest poultry writers, and some authorities have claimed that they were the originals of all bantams. From the best information that can be gathered, it would seem that priority should be divided among the Nankin, the Silky, the Black, and the White Bantams. All of these existed centuries ago and seem to have had a separate origin.

Although the Black and the White Bantams were of such early origin and have continued to be called Black and White Rose-Comb Bantams, as they now exist they are small Hamburgs. They were made by the bantam breeders of England, who have continued their improvement.

BLACK ROSE-COMB BANTAM

109. Origin.—The present type of **Black Rose-Comb Bantam** was made by crossing Black Hamburg males with Rose-Comb Bantam females. In this way they were changed from their former bulky appearance to the slender and trim bantam of the present.

110. Development.—E. Hutton, F. Z. S., of England, was the first to develop the Black Rose-Comb Bantams, and he continued their improvement until he made them miniature Hamburgs.

111. History.—Improvement began in the Black Rose-Comb Bantam about 1850. At that time some were mentioned as having double and some as having single combs. Those having single combs were called Game Dandies. The difficulties in the Black Rose-Comb Bantam were the tendencies to red in the ear lobes and splashes of red and white in the plumage. This was partly overcome by mating together the Black and the White Rose-Comb Bantams for the improvement of ear lobes. These early efforts brought poor results in comparison with what has since been accomplished by the introduction of the Black Hamburg blood. White and Black Bantams are mentioned in the earliest Standards. They have been called African Bantams and Crow Chickens. A marked change has been made in them since 1890, and all or most of the improvements have been brought about through the special efforts of a few bantam fanciers in England; and although some of sterling quality have been bred in America, the credit for their beautiful form and feathers belongs to England.

112. Description.—The Black Rose-Comb Bantam is a miniature Black Hamburg, and its beauty of form and plumage is shown in the color illustration. The main feature for consideration is neat formation of head, including comb, wattles, and ear lobes. The ear lobes should be round, of uniform thickness, close to the side of the face, smooth, and as

soft and white as possible. The surface should have a texture like the finest finished white kid. English breeders state that the lobe should not be smaller than a sixpence nor larger than a shilling. This description will need altering, as some are now bred with ear lobes twice as large as a shilling, which is about the size of an American quarter. The eyes should be hazel or brown; the shanks, black, perfectly smooth, and free from feathers or down.

The tail formation is of more importance, beauty considered, than any other section. The sickles should be long, broad at the base, well circled, and without sharp points at the ends. The inner or lesser sickles should not overlap the main tail feathers. The lesser sickles, including the coverts, should be profuse, with long, flowing saddle feathers and neck hackle reaching almost to the base of the tail. All features desirable in the males should be present in the females in an effeminate degree. Beauty of comb, carriage of wing, and graceful carriage of the body are attractive features. Long legs, close body formation, hollows in the comb, wings tucked up, and irregularly formed or small ear lobes are the most serious faults. White in the face or foreign color of any kind in the ear lobes should not be countenanced. The plumage should be rich glossy black throughout, with no trace of foreign color and with under plumage dark in comparison with the surface plumage.

113. Mating.—Average quality will be produced in the Black Rose-Comb Bantam by mating males and females that are fit for exhibition. Scientific matings, however, require double or separate matings for producing males and females. Matings for producing cockerels must be made from males perfect in Hamburg breed characters, with long flowing tails, the sickles of which overlap the main tail feathers. The females in this mating should have tails longer than are desirable for exhibition. Such females can be produced only from matings for the production of the latest type of exhibition males, and then only when the male-producing type has been well established in a strain.

Rose-Comb and Sebright Bantams

Matings for producing females must consist of exhibition females absolutely perfect in every section, mated with males that result naturally from pullet-bred matings. The main tail feathers of such males usually extend an inch or more beyond the sickle feathers. The sickles, lesser sickles, and tail coverts are considerably shorter than the same in exhibition males. If this manner of mating is continued long enough, the males from the pullet-bred line may eventually become hen-tailed like Sebright males. As yet, this process has not gone far enough to have so influenced their plumage, but it has shortened the main tail feathers of the males and so reduced the saddle coverts and the lesser and greater sickles as to have produced a line of breeding of which the males are more like females and the females of the male line are more like males in many respects than is usual in any other variety of bantam.

The tail plumage of Rose-Comb Bantams usually has more length and is more profuse in cockerels than in cocks. This difference in the plumage of the males must not be accepted as evidence that all the cocks with short sickles are from a pullet-bred line. The only assurance of pullet-bred males is to breed them as described, or to secure them from a strain that is known to have been well established for the production of males and females from separate lines of breeding.

WHITE ROSE-COMB BANTAM

114. Origin.—The original home of the greatest number of fowls of the **White Rose-Comb Bantam** variety was Yorkshire, England. This variety seems to have been a prime favorite with the early bantam fanciers of that locality. The White Rose-Comb Bantam, as bred in Yorkshire, was taken up by E. Hutton, who bred them with Black Rose-Comb Bantams for the improvement of both. The White Hamburgs at that time did not have quality equal to the Black Hamburgs, and, for this reason, a cross of White Hamburgs and white bantams did not prove as successful as the cross of the two varieties of Rose-Comb Bantams.

115. Development.—The White Rose-Comb Bantam was finally developed by selecting the best and crossing them with White Hamburgs, and then selecting and mating the offspring for improving their quality.

116. History.—The White Rose-Comb Bantam was developed at about the same time that the Black Rose-Comb Bantam was improved. For lack of new blood suitable for breeding with them, the bantams of the white variety did not improve as rapidly as those of the black variety, and they are less vigorous and more susceptible to ailments. Finally, a cross with the black variety was resorted to; this resulted in greatly improving the vitality and reproducing powers of bantams of the white variety, which are now almost equal in quality to those of the black variety.

117. Description.—White Rose-Comb Bantams must conform in every way to Black Rose-Comb Bantams, color excepted. Their beak, shanks, and toes are white, usually showing a pinkish tinge. Their plumage is pure white throughout, including the under plumage; the comb, face, and wattles are red; the ear lobes, white. The eyes in this variety are reddish bay.

Although Rose-Comb Bantams should be small, it is possible to have the males much too small to carry the proper amount of tail feathering. A little more size associated with beautiful body and tail plumage is more desirable than small size with deficient tail. Serious faults in the White Rose-Comb Bantam are dark color in the shanks and toes, wings carried too high; foreign color of any kind in the plumage, including yellow or cream color. The proper wing carriage in all Rose-Comb Bantams is shown in the color illustration.

The weights of Rose-Comb Bantams are: Cocks, 26 ounces; cockerels and hens, 22 ounces; pullets, 20 ounces; 2 ounces in excess of these weights will disqualify.

118. Mating.—The finest exhibition White Rose-Comb Bantams are best for producing offspring for exhibition. Better tail and body formation in both males and females

might be produced if the same plan of mating were adopted that is followed for the production of males and females of the Black Rose-Comb Bantam. The White Rose-Comb Bantam has never become so popular as the Black Rose-Comb Bantam, and for this reason equal attention has not been given to improving them.

SEBRIGHT BANTAM

ORIGIN

119. Sir John Sebright, M. P. for Herts, England, originated the **Sebright Bantam.** Much has been written relative to this breed and its origin, and some theories have been advanced by those not well informed on Nature's laws of reproduction. In 1860, W. B. Tegetmeier recorded in his "Poultry Book," the following statement furnished by Sir Thomas Sebright, who lived at that time: "It was about the year 1800 that the late Sir John Sebright began to fashion the Sebright Bantams. The first cross was between a common bantam and the Polish fowl. The offspring resulting from this alliance were bred in-and-in until the required markings and size were secured. Sir John then accidentally found a hen-tailed bantam cock in the country where he was traveling. This short-tailed fowl he inbred with his new bantams. Thereby the progeny gained their present form of square tails."

Sir Thomas was quite satisfied that it was the Polish and not the Golden Pheasant (now called the Spangled Hamburg) with which the bantam was first crossed. For more than 50 years the theory of this method was combated by poultry writers. Crosses were finally made with Golden Polish males and Nankin, Cochin, and Rose-Comb Bantam females. From such matings, small fowls were produced, some of them having buff color and some white, and laced about the edges of the feathers. Within a few years, both crests and single combs were gone as a result of selection and careful mating. Since that time the statements made by both Sir John and Sir Thomas Sebright have been accepted.

Later research has discovered records showing that the first matings for the production of this variety of bantams were made in 1796 and that Sir John was so thoroughly interested in their production that he frequently traveled many miles to see and consider the value of certain kinds of fowls for assisting in perfecting what he was desirous of producing. The Rev. Mr. Dixon states that Sir John traveled many thousand miles to inspect small fowls, and it is supposed that in some of these travels he found the hen-tailed bantam male mentioned by Sir Thomas. One who was associated with Sir John stated that the original hen-tailed fowl was not only small but possessed spangled plumage. Spangling at that time indicated half-moon markings about the ends of the feathers.

From the matings made, the varieties were selected, one having very light or white ground color, the other with salmon or yellow ground color, both laced, or, as Mr. Moubray said in 1834, "beautifully striped and variegated." One of these was named the Golden and the other the Silver Sebright Bantam.

GOLDEN SEBRIGHT BANTAM

120. Origin.—The **Golden Sebright Bantam** was made from the early Sebright Bantams as a result of care being given to selecting and mating to produce bantams having the breed characters, color, and markings portrayed in the color illustration.

121. Development.—The Golden Sebright Bantam has been developed from small fowls that resembled the present type of Sebright but that were larger, longer in the leg, and had tail feathers with an indistinct ground color of yellow or buff. The feathers were marked with what is called horseshoe lacing, which was irregular in form and width and circled like a crescent about the end of the feather, not going back more than two-thirds of the web. From such fowls the Golden Sebright Bantams were developed, and many of them are so beautifully laced about the edges of the feathers that the lacing seems to have been laid on with geometrical precision.

122. History.—The history of the Golden Sebright Bantam begins with the original Standard description, which was printed in 1863. It describes them as having plumage of a rich golden yellow, every feather being laced with black. From then to the present, improvements have been made in them until Standard demands are so rigid in respect to form and color as to make their production most difficult.

123. Description.—The Golden Sebright Bantam has head points like the Hamburg and the Rose-Comb Bantam, the main difference being that the comb is smaller, with shorter spikes. The wings are carried low; the tail is erect and well spread; the tail formation is alike in both males and females, there being no sickles permissible in the males; and the hackle and saddle of both males and females are alike, no saddle feathers growing on the male. The peculiarity of color in this variety is the purple or gypsy color of the face; the ear lobes are the same color or mixed with red, some of them being burnished with enamel white. The shanks and toes are blue or slaty blue.

In general formation, they are short in the back and upright in carriage; the top of the tail and head are carried at about the same height. The eyes are brown, large, and bright. The plumage is golden yellow throughout, each feather laced with black; the under plumage is dark or slate. The surface color in females is not so rich or deep a shade of golden yellow as in the males. The shade of plumage color described for this variety in the English Standard is different from that described in the American Standard. The English Standard states that the ground color should be golden bay with glossy, green-black lacing, and dark gray color in under plumage, each feather being evenly laced around the edge with a narrow margin of black.

The weights of Sebright Bantams are: Cocks, 26 ounces; cockerels and hens, 22 ounces; pullets, 20 ounces; 4 ounces more than these weights will disqualify.

124. Mating.—A breeder who has been most expert in the production of exhibition Sebright Bantams states that they are more uncertain of production than the Golden and

the Silver Laced Wyandottes. Although they have been bred for more than a century, the only way to produce them of a good quality is to establish a strain and inbreed them to the limit; only when such a strain has been established should new blood be introduced; such new blood must be made from several years of careful breeding from another strain of equal quality. This means that a fancier should breed and inbreed his own strain in one place and should have a few of another strain in other pens which are inbred to the same extent, and that from time to time he should refresh each strain with blood from the other.

In mating the Golden Sebright Bantam for the fine line markings, the under plumage in the back of the female should be of a yellowish shade. The most difficult problem in breeding Sebright Bantams is to establish and maintain perfect plumage color, which should be golden bay or golden yellow, not pale yellow. Bantams with rich yellow plumage can be bred from golden-bay males, but few of even passing quality in color and markings will be bred from those with a yellow body color, even though it may be laced with black. The color of the males should be rich golden bay as dark as the body color of the Golden Laced Wyandotte males. Each feather must be laced with brilliant glossy black, and this lacing may be somewhat wider than is desired in the exhibition pen. Females may be one and even two shades lighter in body color than the males, and they may have a black edging of less width than is required in the males. The head points should be as nearly perfect as possible. More details in regard to mating will be found in connection with the mating of Silver Sebright Bantams.

SILVER SEBRIGHT BANTAM

125. Origin, Development, and History.—The **Silver Sebright Bantam** had the same origin, development, and history as the Golden Sebright Bantam.

126. Description.—The color markings of the Sebright Bantams are the same in both varieties, with the exception of

the ground color, which is golden yellow or golden bay in one variety, and silvery white in the other variety. In the Silver Sebright Bantam, the ground color of the entire plumage should be white, but not so transparent as to permit a reflection from the dark color of the under plumage to show through. A creamy or yellow tint may at times mar the purity of the white, and the cross-mating of the two varieties causes the washed-out or faded yellow shade of body color in the Golden Sebright Bantam.

The lacing of the feathers is of prime importance. To conform to Standard description, this should be narrow. Some Silver Sebright Bantams have a fine line of black about the edge of the feather, this line of black being so intense with a shining green sheen as to make the marking brilliant. This is the proper style of marking for Sebright Bantams, but it is most difficult to obtain. The Standard requires a dark shade of color in the under plumage of exhibition fowls, and this cannot be depended on for best results in matings. The head, comb, wattles, and ear lobes must be of perfect formation, and in accord with the Standard description. The eyes of the Silver Sebright Bantam are brown, the same as in the Golden Sebright Bantam, although they frequently show a reddish shade.

127. Mating.—In the mating of Silver Sebright Bantam fowls for best results, every feather of those selected should be surrounded with a line of greenish black; the black lacing of the males should be wider than is desirable in the exhibition fowls. The lacing of the females should not be so wide nor so heavy as in the males, but it should be wider than the Standard requires, and the ground color should be absolutely free from mossing or foreign color of any kind.

Where matings are made to produce the extremely narrow lacing, care must be taken to have enough lacing in the males to prevent the absence of lacing in the offspring. Color will be best sustained from the strength of the color of the under plumage of the fowls used in the matings. To breed very dark, intense markings of medium width, dark or slate color in the

under plumage will be needed. For the production of fine black lines on the edge of the feathers, males having slate color in the under plumage and females that have slate color in the under plumage of the breast and body and are almost white in the under plumage of the back will produce best; but some of the offspring so produced will be so lightly laced as to be of but little value.

One of the most difficult problems to overcome in the production of Silver Sebright Bantams is faulty color and lacing in the tail feathers. To produce males and females with clean, clear, white tail feathers, with no smut on the under side of the feathers, and each feather laced with a line of black, requires matings that cannot be described, but which can be made only by years of experience in breeding and mating a strain for the production of such color. From the introduction of new blood, many badly marked offspring are likely to occur.

SILKY BANTAM

128. The **Silky Bantam** has been made by selecting Silky fowls of the smallest size and inbreeding them to reduce size. Silky Bantams have not been developed enough to equal other bantams in size or breed characters.

129. History.—Silky fowls are known to have existed centuries ago, at which time they were called woolly hens. It is thought that they originated in India, and they have been found in many of the Oriental countries. They have been used for hatching bantam, pheasant, and guinea-fowl eggs, as they are good mothers for this purpose.

130. Description.—The breed characters of the Silky Bantam are shown in the color illustration. The peculiarity in this variety is the walnut, or strawberry comb, as it is called. The beak, comb, face, wattles, and ear lobes are blue, purple, or gypsy color; the shanks and toes are much the same color; the plumage is white; the skin and flesh are of a peculiar bluish tinge. Sample feathers of the Silky Bantam are shown in

SILKY BANTAMS

OLD-ENGLISH GAME BANTAMS
BOOTED BANTAMS

FRIZZLE BANTAMS
SULTAN BANTAMS

Fig. 5; in (*a*) is shown a male hackle feather, and in (*b*) is shown a feather from the body plumage of a female. In size, the Silky Bantam should be about the same as a Cochin Bantam. The female has a small oval crest, and the crest of the male grows back of the comb and extends out in the rear. The shanks and the outer toe are sparingly feathered. The Silky has five toes.

(*a*) (*b*)

FIG. 5

Other varieties such as gold, brown, and black are mentioned by Mr. Entwisle, who states also that he had white Silky Bantam fowls that were red faced, and some that were purple faced; some had single and others had walnut combs. Brown Silky Bantams are occasionally seen, but golden and black varieties do not exist at the present time.

131. Mating.—In the mating of Silky fowls to produce small or bantam fowls it is necessary to select small females and to mate them with small males, hatching the chicks late in the season and rearing them during the winter months. Special attention must be given to the selecting of fowls with perfect combs and crests; the crests should be as perfect in form and as large as can be found. In addition to this, the fowls should have profuse feathering, with as much down as possible; their legs, shanks, and toes should conform to the requirements of the breed.

MISCELLANEOUS BANTAMS

ANDALUSIAN BANTAM

132. Bantams having the general breed characters and the color and markings of Andalusian fowls have occasionally been shown. These are called **Andalusian Bantam.** The origin and development of these bantams cannot be traced, They may, however, be produced by inbreeding the smallest Andalusian fowls.

ASEEL BANTAM

133. The **Aseel Bantam** has been mentioned among the varieties seen at some of the English shows. Bantams of this variety conform to the shape and color of the Aseel fowls, but in size they are much too large to conform to the weights that would be natural for the Aseel Bantams. They are said to have been produced by crossing Old-English Game Bantam hens with small Aseel males. The variety colors would naturally conform to the variety colors generally found in the Aseel Game fowls.

FRIZZLE BANTAM

134. There is bred at the present time a variety of bantams having feathers like the Frizzle fowl. This variety is called the **Frizzle Bantam.** Just how the Frizzle Bantams have been produced is uncertain. It is claimed that some of the Frizzle Bantams that came from Japan were crossed or mated with some Frizzle fowls of small size, and as a result of selecting and mating the smallest and the best of the offspring, the Frizzle Bantam was created. Frizzle Bantams are bred in several variety colors—black, buff, red, and white. The most

attractive of all are those of the pure white variety. In form they range from the natural shape of the Frizzle fowl to the Cochin and Brahma Bantam.

GERMAN BANTAM

135. Several varieties of bantams are bred in Germany, and although they are not, as yet, generally known, they are of attractive appearance and have breed characters peculiar to themselves. In general make-up the **German Bantams** are more like the Booted than other varieties of bantams. Some have crests, others have muffs, and the greater part of all have shank and toe feathering like the Booted Bantam. Some have vulture hocks without shank and toe feathering. Most of them droop their wings like the Sebright Bantams. All of them are short in leg, upright in carriage, and as aristocratic in their bearing as are the Rose-Comb Bantams.

LANGSHAN BANTAM

136. About 1890 some black bantams were shown that were a fairly good imitation of Langshan fowls. The variety is known as **Langshan Bantams,** and is said to have been made by selecting, inbreeding, and reducing in size from Langshan fowls to Langshan Bantams. It was claimed that they descended from a Langshan hen of small size. They had the Langshan type to a limited extent and beautiful black plumage.

LEGHORN BANTAM

137. Several efforts have been made to bring into public notice bantams that are a fair imitation of Leghorn fowls. Among the best of these were the **Rose-Comb Black** and the **Rose-Comb White Leghorn Bantam.** The bantams of these varieties were evidently produced by mating Rose-Comb Black Leghorns with Black Rose-Comb Bantams and White Rose-Comb Leghorns with White Rose-Comb Bantams. But few have been bred.

MINORCA BANTAM

138. Bantams that were a poor imitation of Minorca fowls were shown some years ago. Following these, some black fowls called **Rose-Comb Black Minorca Bantam** were shown. There was so little difference between them and the Rose-Comb Black Leghorn Bantams as to lead to the conclusion that both were of the same origin.

NANKIN BANTAM

139. Origin.—The **Nankin Bantam** is thought to be one of the oldest varieties, if not the oldest variety, of bantam. In what place or from what source the bantams of this variety originated is not known.

140. Development.—Nankin Bantams have never been developed to any extent. They have largely been bred promiscuously as was done prior to the introduction of other varieties.

141. History.—Nankin Bantams have been mentioned for several centuries. They were used as a part of the base from which to produce bantams of many kinds. They have been referred to as having feathers on their shanks, and also as having shanks without feathers. As part of the foundation blood for making variety bantams, they have been most useful.

142. Description.—The Nankin Bantams are small; their plumage is dark cinnamon color, with considerable black in the flights; the tail is heavily bronzed with dark cinnamon color, approaching black. In some instances, the shanks are dark yellow; in others, of a bluish cast. Some have four toes and others have five.

143. Mating.—The Nankin Bantams have become almost if not entirely extinct, and are not likely to be revived. If some could be found and mated, and their offspring selected and remated, they might be revived into a bantam to resemble the Cochin, the Silky, or the Booted Bantam.

RUMPLESS BANTAM

144. The **Rumpless Bantam** has been made by nipping the rump from bantam chicks as soon as they were hatched. Rumpless Bantams can be made from Rumpless fowls by selecting the smallest, inbreeding, selecting the offspring, and rearing the chicks during the winter months.

SCOTCH GRAY BANTAM

145. The **Scotch Gray Bantam** has the size and shape of the Rose-Comb Bantam, with plumage the same as the Barred Plymouth Rock. It has been bred and shown in England as the Scotch Gray Bantam, and in America as the Barred Plymouth Rock Bantam. The bantams of this variety are said to have been made by selecting the smallest Scotch Gray males and mating them with several kinds of Cuckoo Bantam females, and selecting and reducing them in size by breeding from small offspring. One strain is said to have been produced entirely by mating a beautifully colored Dominique Leghorn male with a very small Scotch Gray female, and perfecting the size, color, and markings by careful matings of the resulting offspring.

SPANISH BANTAM

146. A fairly good imitation of Spanish fowls of bantam size has been shown as **Spanish Bantam.** None of them are known to exist at the present time, but they might be made by selecting small Spanish fowls, mating them with small Leghorn fowls of the same color, selecting the smallest of the offspring, inbreeding, hatching late in the fall, and rearing the chicks out in the cold.

SULTAN BANTAM

147. The **Sultan Bantam** is said to have been made by mating White Polish Bantams with White Booted Bantams, and then remating the smallest of the female offspring with Sultan males. The offspring are novel in appearance, but they have never been bred to any extent.

YOKOHAMA BANTAM

148. Some exceptionally small Yokohama fowls have been selected and inbred until very small offspring have been produced. These have been shown as the **Yokohama Bantam.** A few have been seen at the leading shows of England, but up to the present none has been shown in America.

FOWLS OF THE PHEASANT FAMILY

VARIETIES AND HABITS

. 1. The pheasant family of fowls is a group of fowls of the Gallinæ order to which the domestic fowls belong. The family includes, in addition to the true pheasants, the partridge, grouse, quail, turkey, guinea fowl, peafowl, and a number of others. To poultrymen, the most important differences between the fowls of the pheasant family and other gallinaceous fowls are in their habits. They do not readily lend themselves to domestication, although some members of the family, the turkey for instance, have been domesticated to the extent that they can be raised profitably. When bred in domestication, the fowls of this family require conditions more or less closely approaching those of the wild fowls of the same kind. They cannot be so successfully raised in close confinement as the domestic fowls. The turkey, especially, must have ample range, where the soil is uncontaminated and where it can pick up at least a part of its subsistence. Even under such conditions, domestic turkeys have deteriorated to the extent that many of them are smaller and less hardy than wild turkeys. The prairie chicken of the West, the grouse, the quail, and the various birds known as partridges cannot be domesticated. However, their eggs may be hatched under a hen and the young enclosed and fed in a coop. In this condition, they may be grown to maturity, but the wild instinct is never overcome so that they can be liberated in the poultry yard. At the first opportunity they escape and seek their native environment.

The only fowls of the pheasant family that will be discussed in this Section are the *turkey*, the *guinea fowl*, and the *peafowl*.

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TURKEYS

ORIGIN

2. The originals of all turkeys were native to America. The **North American turkey** (*Meleagris americana*), the **Mexican turkey** (*Meleagris mexicana*), and the **Honduras turkey** (*Meleagris ocellata*) are all well-known wild varieties that still exist. It is thought that a fourth variety, a black turkey, might have existed in Cuba and Porto Rico, and that this may have been the variety discovered by the Spanish explorers, who took specimens with them on their return trips home. Whether or not this is true, the turkeys first found and taken from America to Spanish countries were darker in plumage than any of the existing wild varieties.

The North American turkeys were found in the United States from Mexico to Canada, also through the southwestern and eastern states. As late as 1873, large flocks existed in the Middle West. An unusually large flock of about 3,000 turkeys was seen in Central Iowa during the fall and winter of 1873. They were large and vigorous and their plumage was as rich and beautiful as it is possible to have in this variety. Shortly after this date they began to disappear, and 10 years later but a few could be found in the same locality.

Mexican turkeys were plentiful below latitude 35°, and the Honduras turkeys are still found in that part of Central America adjacent to Honduras.

The Honduras turkey has not been successfully bred away from its native heath. Neither has it reproduced when kept with other varieties. The North American and Mexican varieties have been prolific with all varieties of domestic turkeys, but they were not taken to Spain until many years after the black or dark-plumaged turkeys that were first taken.

VARIETIES AND THEIR DEVELOPMENT

3. The original Norfolk turkeys of England were black and must have descended from the black turkeys that were first taken from the West Indies to Spain about 1518, and later to England. Subsequently, Mexican turkeys were taken to England, and by crossing them with the black Norfolk turkeys the Cambridge turkey may have been made. Early writers state that some of the Cambridge turkeys were gray, some were black, and some were white, and frequently they approached the coloring of the North American wild variety. Other writers describe them as varying in color, being gray, pied black and white, and rusty brown, the gray being the most common. This would indicate that gray plumage was prevalent in the Cambridge turkeys. This color would come naturally to them from the Mexican variety.

The same shade of plumage existed in the turkeys that were bred in France, in England, and in their near-by colonies, and the Germans bred much the same kind of turkeys. When America was settled, the pioneers brought the kind of turkeys that were bred in their homes. Some were taken to the West Indies, some to Mexico, and some to North America, where they mingled with the wild varieties of the localities, and in this way began the natural crosses from which the Bronze and Narragansett turkeys were made. Later, both North American wild and Bronze turkeys were carried into England, and from them the Cambridge Bronze turkey was made.

It has been claimed that white turkeys intermingled with wild turkeys of Kentucky, and that from such crosses the Bourbon Red turkeys have descended. Buff turkeys were probably made from crossing white and other varieties. Of whatever variety color turkeys may be, all have descended from the original wild varieties found in America.

4. The remarkable attractiveness of the American turkey is fully proved from the fact that in less than 25 years after the discovery of America it was in use on the table of the royalty of Spain. The preference of the turkey as a beautiful bird is

mentioned by Martin Doyle, who says that, according to Norfolk tradition, an ancestor of Sir George Strickland, Bart., first brought it into England; as a proof of this statement, the crest of the Strickland family, given by Edward VII about 1550, is a turkey cock. Edward Brown, of England, quotes the fact that the first turkey was eaten in France at the wedding feast of Charles IX and Elizabeth of Austria. A number of turkeys had been sent from Boston to St. Malo, and when the ship reached that port the provincial governor despatched a dozen to the chef of the king's kitchen. These were stuffed and served. Charles IX was so pleased with them that he began to breed turkeys in the forests of St. Germain. From that time to the beginning of the 19th century, turkeys were kept in all parts of the world for table purposes only. Following this, more attention was given to their selection, and about 1850 the people of America began to breed them more carefully for the separation of plumage color; and from then to the present time marked attention has been given to the careful breeding of the several varieties, none of which, however, has ever equaled the popularity of the Bronze turkey.

5. The wanton destruction of wild turkeys throughout North America almost annihilated the race, and the careless inbreeding of domestic turkeys so destroyed their vitality as to open the way for their speedy destruction through a disease called blackhead. The alarm was sounded against such destruction when it was too late to save them in their wild state. Some landowners in Virginia and Pennsylvania restricted their estates for the protection of the few turkeys that were left in that locality. The introduction into the domestic turkeys of new blood from the few remaining wild turkeys started a reviving influence. In addition to this, turkey breeders who had given special attention to variety colors began the strengthening of their flocks by culling the weakling females and by the use of wild males. Although the domestic turkeys still lack their original vitality, so much has thus been accomplished as to warrant the statement that their original vigor can be restored. England, France, Belgium, and other countries have

joined in the work of improving their reproducing qualities and in strengthening their vitality. In addition to this, an effort has been made to improve their domestication, until at the present time it is possible to keep, breed, and rear turkeys in closer confinement than formerly.

6. Turkeys were described, but were not mentioned by variety names, in the original Standard that was compiled in England in 1865. Bronze turkeys were described in the American Standard of 1867, and in the Standard of 1874, the Black, Bronze, Buff, Narragansett, and Slate turkeys were described; the White turkey was added to the Standard in 1875. This should prove that the variety colors of turkeys were well established before they were considered as standard varieties bred for exhibition.

The turkeys mentioned in the Standard of 1875 have all been developed into varieties worthy of the name given them. The work of developing them has been accomplished almost entirely in America. The fanciers of England have made the Norfolk, or Black, turkey and the Cambridge Bronze turkey; the poultrymen of Belgium have made the Ronquieres turkey. But little attention has been given to the development of turkeys in Spain and Italy. In these countries, the turkeys are small, have dark plumage, are regularly colored, and of remarkably good quality as table poultry. The best of the European breeds that reach the London markets are said to come from Normandy, and some of fairly good quality are sent from Russia. All of the Continental turkeys that reach the London market, with the exception of those from Normandy, are of the same type as the Italian turkeys.

In England, the Black, the Bronze, and the White turkeys are considered as true varieties, and the others are accepted as subvarieties that would naturally be expected to come as sports from these varieties as a result of promiscuous breeding. In America, seven varieties are described as standard; the Black, Bronze, and White turkeys are the favorites.

BREEDING OF TURKEYS

7. Turkeys were formerly kept in a semiwild state, and this practice is still followed in many localities. From Missouri to California and as far south as Texas, large numbers are bred, and most of the breeders permit their turkeys to roam at will during the day, encouraging them to return at night and to roost in the open or partly open sheds, on outdoor roosts, or in trees near the barns and poultry houses. When this method is followed, breeding can be controlled to a certain extent by having only the best grade of females, selected for their size, health, and vigor. Strong, healthy females 2 or 3 years old are best for use in such flocks. Such females mated with wild or half-wild males have produced offspring from which strains of the Bronze turkey have been renewed or established. Females bred in this way have reached a weight of 34 pounds, and males from 40 to 48 pounds. These extreme sizes are not best for breeding purposes, but such proportions prove that they can be brought back to their original size, health, and vigor. In Belgium, in France, and in England they are more closely confined than in America.

Pedigree breeding may be carried on with such certainty as to enable the breeders to select the offspring from each female, as well as to know the sire of each offspring. Pens for pedigree breeding of turkeys are shown in Fig. 1 on a $\frac{1}{2}$-acre tract. The females are confined together in the large enclosure at the right, and a nest for each is hidden beneath the growing shrubbery or under branches cut from pine trees. A box or frame of reasonable size is either slipped under the shrubbery or covered with pine branches. Occasionally two hens will lay under the same shelter. Usually, when this occurs, each hen will make her own nest, and, by watching them, the breeder will avoid confusion in gathering the eggs. The eggs from each hen should be marked and female chickens used to hatch them. Large Brahma hens can cover from 5 to 7 eggs, Plymouth Rock hens from 4 to 6 eggs. One or two turkey hens should be set at the same time, usually each on her own eggs, and when the poults are hatched, they should be toe-marked, and all that are

FIG. 1

hatched by hens and by turkeys should be given to the turkey hens to brood.

The small yard on the left is for one of the male turkeys used for breeding purposes. In the rear of the small yard are two larger yards for confining one or more male turkeys. In addition to these special pens, other flocks of five females and one male can be confined in an orchard enclosure divided into two pens, each surrounded with an 8-foot fence. In this way, five hens in each pen can be successfully mated with males selected for their size, strength, and freedom from disease. In the special pens, shown in the large enclosure, individual or pair matings are practiced, and from such careful matings many of the finest turkeys are produced.

The color illustration of the pair of Bronze turkeys was painted from life. These turkeys were said to be the best of their kind. The male was 7 years old when the illustration was made, and the female was in her fourth year. Only a few days before the sketch was made the male had been brought back from Kentucky, where he had been sent to gain the advantages of the environments of that locality and to be bred with a flock of females that were half wild and half Bronze. From this change of climate, the vigor of the male was strengthened and the turkey crop of the locality where he wintered was greatly improved.

8. A Method of Mating Turkeys.—In one method of mating turkeys, each male is kept by himself in a small yard next to a main enclosure in which the females are confined. The males will strut up and down in their yards and call to the hens. They, however, until they feel disposed to mate, will take but little notice of the toms. At such times, a hen turkey will come close to the fence that separates her from a male, squat, spread her wings, and call to the male. After she has done this several times, the male selected for pairing with her is driven into the enclosure where the female is confined, and the two are watched until copulation has taken place. To copulate with a hen, the male turkey hops up on her back, tramps with his feet and beats with his wings until she lifts her tail.

When she does this, complete service is given. The whole operation may take 5 minutes or it may be finished in half a minute. When the operation is prolonged there is danger of the female getting over on her side. For her safety, in such cases the tom should be pushed off. Sometimes the position of the tom prevents the female from lifting her tail, and no matter how long he stays on her, copulation is impossible. Old toms are more likely than young ones to lacerate the back and sides of the female.

As soon as service has been completed, the tom must be returned to his enclosure; otherwise he will return to the female and tramp the flesh from her back and sides in an attempt to renew intercourse with her. One copulation is usually sufficient for a hen turkey, and she may not permit another. If, however, the female continues to solicit the attentions of the male, the tom may be returned to her for a second service. One satisfactory service from the male will ordinarily fertilize all the eggs for that period of laying up to the time the female becomes broody, yet some hens will accept frequent copulations from the male. If a turkey hen is not permitted to sit after she has laid her clutch of eggs and becomes broody, she must be again served by the male in order to have her next clutch of eggs fertile.

BLACK TURKEY

9. Origin.—The **Black turkey** was the first of the domestic varieties of turkey, and was originally known as the Norfolk turkey. It was brought to America by the early settlers, and has since been bred as a distinct variety.

10. Development.—The Black turkey was first developed about Norfolk, England. It was brought to America where it was bred in small numbers, but was soon almost lost sight of through intermingling with the wild variety. Later, the Black turkeys were separated and were improved in size by being bred with dark-colored offspring of Bronze turkeys. Turkeys of this variety, when fat, had the peculiarity of yellow skin, and for this reason they were much admired.

11. History.—The early history of the Black turkey has been told in the origin and history of all turkeys. During the earlier existence of these turkeys in America, they were neglected and became small and undersized. A few breeders brought them forward by selecting the largest specimens and mating them with very dark offspring of Bronze turkeys. They have been greatly improved, but interest in them has not increased as it should. They are excellent for market purposes from the fact that they are very tame and mature early into marketable sizes.

12. Description.—The Black turkey is of medium size. Mature males weigh 27 pounds; young males and hens, 18 pounds; and females less than a year old, 12 pounds. The Black, Buff, and Slate turkeys are of the same Standard weights, but the Bronze turkey is many pounds heavier. In color, the beak, shanks, and toes of the Black turkey are dark or slaty black; the head is red; the eyes are dark; and the plumage is lustrous black throughout. When fat, the skin is yellower than in any other variety.

13. Mating.—In selecting Black turkeys for the production of exhibition offspring, hens in their second or third year, which weigh from 16 to 18 pounds, should be mated to young males that weigh in their first year from 16 to 18 pounds and in their second year from 25 to 28 pounds. All should have full, round, plump, and heavy body formation, and beautiful black plumage throughout, with a brilliant luster of green sheen.

BOURBON RED TURKEY

14. Origin.—It is thought that the **Bourbon Red turkey** originated in Kentucky through the promiscuous breeding of the wild variety that is found in the mountains of Kentucky with turkeys of the white variety. Some claim that they were an original buff variety that is indigenous to the mountains of Kentucky. Naturalists believe that all buff, brown, or reddish-brown turkeys have come from the intermingling of a wild variety with the domestic White turkeys and the Bourbon Red may have come from such crosses.

15. Development.—Bourbon Red turkeys were bred in small numbers in a few localities until they were taken up and bred in opposition to the Buff turkey. They were also used to improve the size and vigor of the Buff turkey. Their unusual vigor attracted attention and they were separated and developed into their present type.

16. History.—Bourbon Red turkeys were first bred in Kentucky and were distributed from there into Ohio and other localities. Their valuable qualities were brought into public notice and they were admitted to the American Standard in 1910 as a variety likely to supersede the Buff turkey.

17. Description.—As described in the American Standard, the Bourbon Red turkey should have head, beak, eyes, and neck the same as other turkeys; the body plumage should be dark brownish red; the wing feathers and tail almost white; the shanks and toes are described as reddish pink. They are large turkeys with cinnamon plumage, many of them being marked with black lines near the point of the feathers. Their plumage is more or less intermingled with white, and their shanks and toes are reddish brown, shading into yellow. Their plumage color is such as would be expected to result naturally from crossing the Buff and the Bronze turkeys and selecting for and breeding from offspring with dark-red or cinnamon-colored plumage. They are not true in color and markings of plumage, neither do they conform to the Standard color description.

18. Mating.—The only rule of mating that can be applied to Bourbon Red turkeys is to select those conforming to the Standard description and to mate and remate them continually until a strain has been established that will produce offspring approaching perfection. The greatest value from this variety will be derived from crossing it into other varieties to strengthen vitality sufficiently for producing turkeys for market purposes.

BRONZE TURKEY

19. Origin.—The **Bronze turkey** has been made by crossing the wild North American turkey with the Black turkey and by selecting and breeding the offspring thus obtained and recrossing them with the wild variety.

20. Development.—The Bronze turkey has been developed by similar methods in America and England. In America, the Bronze turkey was made and developed, and in England the Cambridge was changed into the Cambridge Bronze by crossing the original Cambridge variety with the American Bronze. Owing to this development, the Bronze turkey is the same throughout the world.

21. History.—In his earliest writings, Audubon mentioned the fact that the wild turkeys of North America would come from their haunts to the farms and feed and mate with the domestic turkeys. Such matings produced turkeys with plumage that was almost as rich in color and markings as that of the wild variety.

The most probable theory of the beginning of the Bronze turkey is that the few domestic turkeys that were brought from other lands to America mingled with the North American wild turkey, and that from such matings the Bronze turkey was established. Farmers living in Central Iowa in 1869 killed all their male turkeys and depended entirely on the wild variety to come into the barnyards and mate with the turkey hens. Size and quality were so much improved in this way as to attract the attention of others, and it is reasonable to suppose that like matings occurred in other localities. In this way the domestic turkeys of North America were transformed into the most vigorous and the most prolific of all turkeys.

22. Description.—The Bronze turkey has the same general shape or formation as all turkeys, which is exemplified in the color illustrations. The head is long and of peculiar formation, being bare of feathers well down the neck of the male, but showing a rough, uneven growth of lumps, called

Bronze Turkeys

caruncles. A similar but less conspicuous growth occurs on the females. Instead of a comb, male turkeys have a small, round growth on the top of the head. This growth enlarges to many times its natural size when the turkeys strut; at the same time the head and face assume a red or reddish-purple hue, and the growth down the throat and down the neck becomes enlarged. But little of this is seen in the female turkey. The neck is well curved in the male, which carries the head upright and arrogantly; the female shows less of this. The breast is round, broad, and deep from the throat down under the breastbone to the thighs, and along from the point of the breast to the rear of the abdomen; the back is broad and long, with the tail carried in a direct line with the back. When standing erect in a natural position, there is a regular incline from the base of the neck to the tip of the tail. The shanks should be strong and set well apart; the toes, strong. The greater the width between the thighs, the more vigorous the turkeys will be. The body formation should be round, deep, broad, and full. A tuft of hair called a beard grows from the breast of the males after they are 9 months old. Such growth may appear on the breast of females after they are a year old.

The weight of the Bronze turkeys is, for adult males, 36 to 40 pounds; for young males, 33 to 35 pounds; for males less than a year old, about 25 pounds; for hens, 20 pounds; for hens less than a year old, 16 pounds. Although such weights are standard for this variety, it is not unusual for turkeys to weigh even more.

The head of both sexes of turkeys of all varieties is a rich red, and the red extends well down on the neck of the male. The beak, shanks, and toes of the Bronze turkey are dark; as it grows older, its shanks and toes change and become brightened with pink or red. The plumage of the male is black, embellished with bronze sheen, each feather having a black bar across the tip and the end fringed with white. The females have more white in their plumage, thus giving them a lighter appearance. They are well described as having a surface color of black, brilliantly shaded with bronze and

glistening green sheen, the richness of which is exceeded only by that of the North American wild turkey.

23. Mating.—Females that average 16 pounds or more, that are more than a year old, and that have every feature required by the Standard description should be mated with males that have every feature that is most desirable in the Bronze turkey. All turkeys used for breeding should have a good length of breast and body; they should measure well around the breast, back, and body, just forwards of the thighs, which should be set well apart. They should be prominent in the breast and have beautiful plumage.

Too much encouragement has been given to length of shanks and legs in the Bronze turkey. The breeding turkeys should have shorter legs than are common in this variety. Shanks, toes, and excessive length of leg add considerably to the waste product, which lessens their value as market poultry.

BUFF TURKEY

24. Origin.—The origin of the **Buff turkey** cannot be definitely traced. Turkeys of this color have appeared in every locality where turkeys have been grown. The French call them Chocolate; the English, Buff or Fawn; and in the American Standard they are described as Buff turkeys. Buff and cinnamon color, either or both, is apt to appear in flocks where Bronze and White turkeys intermingle. Both the Buff and the Bourbon Red turkey probably had about the same origin. Evidence of the uncertainty in color of the Buff turkey is shown in the fact that specimens with clean, clear plumage free from black, white, or other foreign color are rare.

25. Development.—Buff turkeys have never been developed to a condition in which they can be depended on to produce offspring having a clean, clear shade of color that might be termed buff, fawn, or chocolate color. A few fairly good ones have been produced from time to time, but they have received so little attention that they have never been finished into a perfect variety.

26. History.—Buff or red turkeys have been mentioned occasionally since the beginning of the domestication of turkeys. In Pennsylvania, they were known as the Tuscarawa Reds. Moubray mentions turkeys that had plumage of a light buff or delicate fawn color and were exceedingly neat and Quaker-like in appearance when the shade was unbroken, but it was sometimes mixed with white. He also mentions a variety known as Copper or as Dutch Red, some of the darker shades of which were called Cinnamon. He mentioned another variety that had dark brownish-red plumage, the webs of the feathers being penciled and tipped with a darker olive brown or rusty black.

These descriptions seem to refer to turkeys having plumage color like the Buff or the Bourbon Red. Moubray also mentions the fact that they were found in Holland and in several localities of England.

27. Description.—Buff turkeys are described in the American Standard as having a body formation and a general make-up the same as other turkeys, the main difference being that the shanks and the toes of the turkeys of this variety are bluish white or flesh colored. The plumage is buff colored throughout, the wings and tail shaded with a lighter color. They range in plumage from a light fawn to a cinnamon brown more or less broken with white in wings and tail.

28. Mating.—In mating Buff turkeys, large hens having a plumage color as perfect as can be selected should be mated with males as nearly perfect in breed characters and plumage color as can be found. To strengthen vitality, increase size, and improve plumage color, the finest colored Bourbon Red females mated with the best Buff males will produce offspring that may safely be bred with the Buff turkeys.

CAMBRIDGE TURKEY

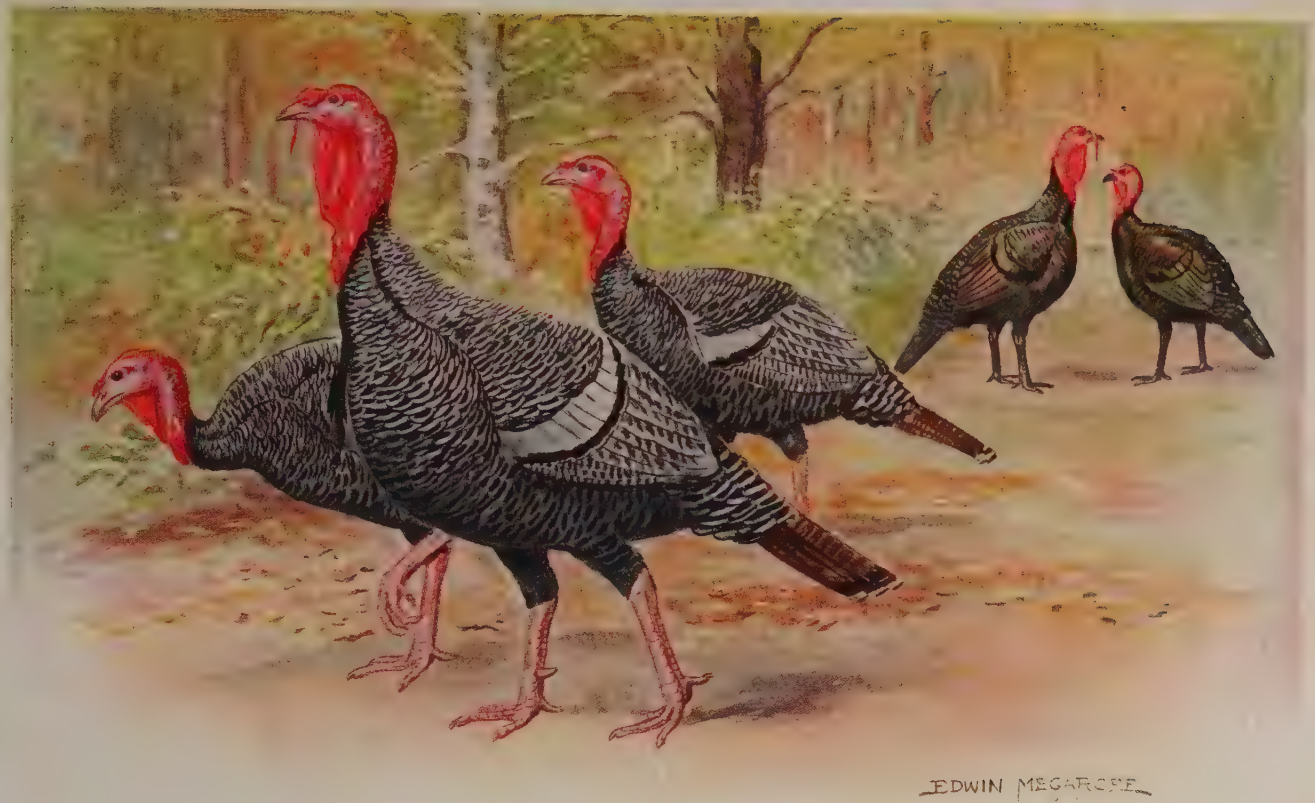
29. The original **Cambridge turkey** was more like the Narragansett than any other turkey. The Cambridge turkeys were large and prolific and were made, perhaps, by intermingling the Mexican wild turkeys and the Norfolk turkeys, of England. They were popular in England for many years and were the choicest turkeys bred in England and other near-by countries.

When American Bronze turkeys were introduced into England, they were bred with Cambridge turkeys, and this intermingling of the Bronze with the Cambridge was continued until the Cambridge turkey was transformed into the *Cambridge Bronze*. It is now described in the English Standard as the *Bronze turkey*, and the description in the English Standard conforms with the description of the Bronze turkey in the American Standard. In fact, Bronze turkeys are now identical in England and America.

NARRAGANSETT TURKEY

30. Origin.—Although it is evident that the **Narragansett turkey** originated in Rhode Island, there is no trustworthy information concerning its origin. Some claim that these turkeys were made by crossing Cambridge and Black turkeys; others affirm that they occurred naturally as offspring from several kinds bred in that locality; and still others state that they came from crossing Black turkeys with turkeys from Mexico. It has also been claimed that they have been made by crossing Mexican wild turkeys with light-colored Bronze females. A natural conclusion would be that they had been made by crossing turkeys having a mixture of gray in their plumage with Mexican wild turkeys. This conclusion is supported by the fact that the Mexican wild turkeys had white markings in the back and body, and tail feathers. Such turkeys crossed with the lightest colored Bronze females would naturally produce offspring marked like the Narragansetts.

Turkeys having gray plumage have been seen in every locality where turkeys have been grown. Moubray mentions



Narragansett and Black Turkeys

them as the bustard variety. They were formerly plentiful in Ireland, in the German provinces, and in parts of France. They have never been considered as a separate variety, and they are more like badly marked light-colored Narragansetts than those of any other variety. Turkeys are frequently offered for sale in the markets that have plumage that might be described as gray, grayish black, or grizzled slate.

31. Development.—Narragansett turkeys were developed in that portion of Rhode Island adjacent to Newport and Narragansett Bay. They were bred also in several parts of New England and in Central Ohio. During recent years, the best specimens have been bred in the western part of Rhode Island and about New London, Ohio.

32. History.—Narragansett turkeys might be called a local product, as they have never been generally distributed throughout the United States, and but few if any have ever been seen in England. At one time they were considered the best turkeys for market purposes, and much of the reputation gained for Rhode Island turkeys was established through them. Following the persistent claim of unusual value for the Bronze turkeys, the Narragansett was neglected. Turkeys of no other variety are superior to them for any purpose.

33. Description.—The Narragansett turkey bears the same relation to the Bronze turkey as the Wyandotte bears to the Plymouth Rock. The Narragansett is a close, compactly built turkey as compared with the larger and more lengthy formation of the Bronze turkey. The Mexican wild turkey, from which they are thought to have come, is shorter in body, thighs, and shanks, and more compactly built than the North American wild turkey. The color and markings of the Narragansett are described in the Standard as black, dull black, and metallic black. The most beautiful coloring is the rich, metallic black ground color, emblazoned with bronze and plainly marked at the ends of the feathers with a light shade of gray, verging on white. The color illustration of them was made from life and shows the distinctive color and markings of the best exhibition specimens of this variety.

34. Mating.—In selecting Narragansett turkeys from which to breed offspring for exhibition, the main features for careful consideration are correct body formation and proper size, which should not be less than 16 pounds for old hens; pullets, if used, should weigh 12 pounds; males, from 18 to 25 pounds, according to their age. These weights are for turkeys in good condition for breeding and not fattened for market. Color and markings should be carefully selected to conform to Standard description. At the present time no better guide can be followed than to have them as nearly as possible like the turkeys in the color illustration. After a strain has been established, they can be selected for improvement in body formation and plumage color. A strain must first be established that will breed true to form and color, and special attention should be given to maintaining and improving the plump, compact body formation and preserving the low-set carriage natural to them.

RONQUIERES TURKEY

35. Origin.—Edward Brown, of England, gives it as his opinion that the **Ronquieres turkey,** which originated in Belgium, was made by intermingling black turkeys from France with gray and white turkeys, and crossing the offspring with Bronze turkeys.

36. Development.—The Ronquieres turkeys have been developed in Belgium with the end in view of having the greatest amount of meat and the least amount of offal, of having them with short extremities and the body lengthened along the breast line, and also of having them of a body formation that will respond quickly to the process of fattening so extensively followed in that locality.

37. History.—For many years Ronquieres turkeys were bred without consideration for form or color, the purpose being to produce the best market poultry. Recently, they have been bred to a more uniform shape and color. They have not been brought to America.

38. Description.—Ronquieres turkeys have the same general formation as other turkeys. In color, the males range from dark gray to yellow and black, some having feathers penciled with fine, black, crescent-shaped lines bordered with a brilliant black bar; others have the ends and edges of the feathers marked with light gray or white. The females are irregular in color and markings, ranging from yellow to black, many of them being gray, with each feather marked with a dark bar. Both males and females always have white feet and toe nails.

The following statement in regard to the Ronquieres turkey is from Louis Vander Snickt, of Belgium: "This variety is divided into three subvarieties: the gray-brown; the buff, which is the most beautiful; and the white and black. In the last named there are pure white or white with a little black spot or a black lacing on each feather, and also finely ticked with black, until some specimens are almost entirely black. So long as the legs are white, this does not matter, but when the plumage becomes totally black, the legs are black also, and the turkey can no longer be called a Ronquieres."

39. Mating.—Ronquieres turkeys are mated for size, shape, and length of breast and body formation best suited for market. But little attention is given to selection for color. In some localities where they have been selected and mated for plumage color, they are black with gray, somewhat like Narragansett turkeys.

SLATE TURKEY

40. Origin.—The **Slate turkey** originated from flocks where all varieties were permitted to intermingle. Turkeys with slate plumage will come from cross-mating Black or Bronze turkeys with Buff, Fawn, or White turkeys.

41. Development.—Slate turkeys have never been developed to any extent. Although they have been recognized as a distinct variety with slaty-blue plumage, they are irregularly marked and cannot be depended on to breed true to color.

42. History.—But little can be said about the Slate turkeys, except that they have always been recognized as a separate variety, but they have never been handled in a manner that would make them popular.

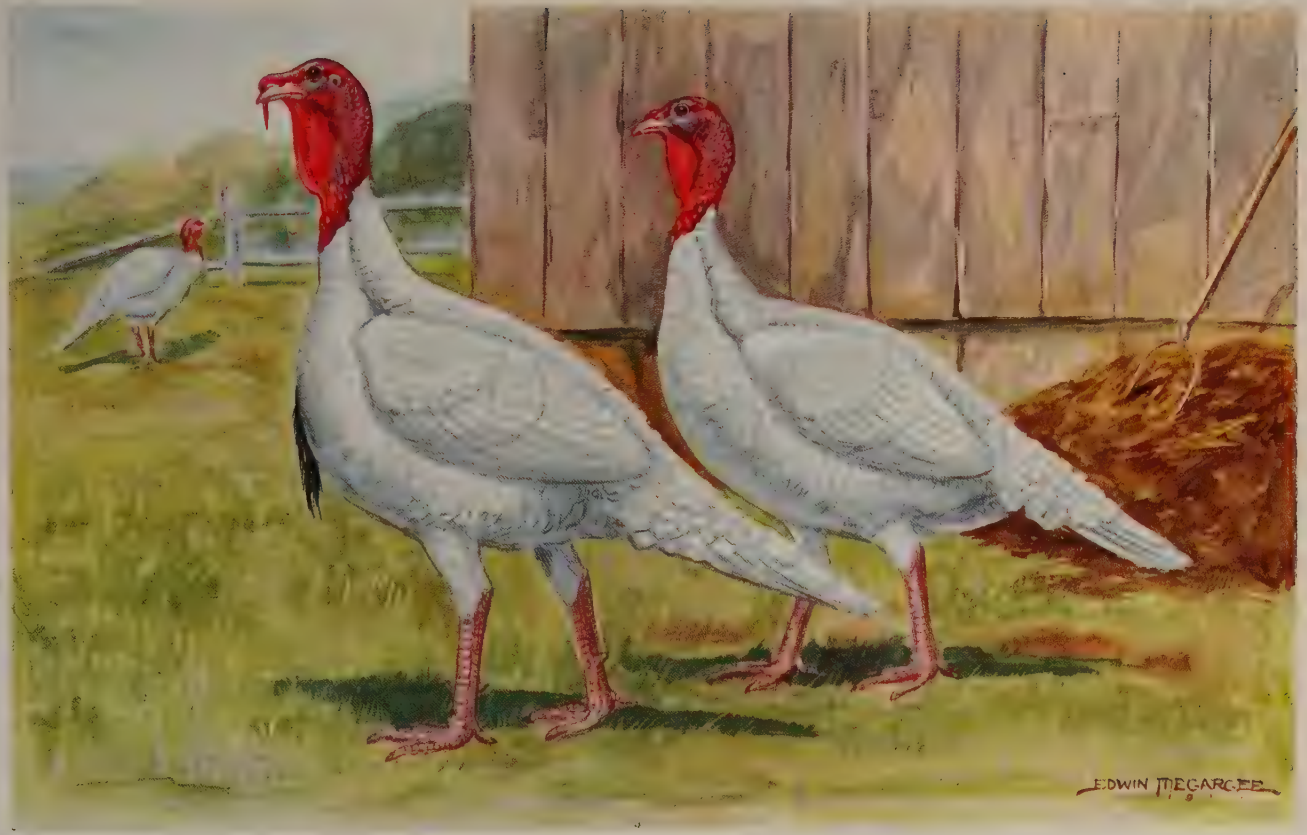
43. Description.—In general formation, Slate turkeys should be the same as turkeys of other varieties. Their plumage should be slate, dark slate, or slaty blue throughout, and usually dotted with black spots. Their shanks and toes are either light or dark slaty blue to match the plumage. Although this description meets the requirements of the Standard, but few turkeys conform to it. The plumage is usually of a slate color and marked and splashed with black; their shanks range in color from a light to a dark slaty blue. But few of attractive color have been bred.

44. Mating.—If as much attention were given to Slate turkeys as is necessary to produce the color and markings of the Andalusian fowls, they could be made attractive. To establish slate color would require years of careful breeding from the best that could be found, and then mating and remating the offspring until in color and markings they had become the same as the Andalusians.

WHITE TURKEY

45. Origin.—Early writers state that white turkeys came from Holland, and in respect to the place of their origin they were named White Holland turkeys. They are generally known as the **White turkey.** Turkeys with white plumage might come as sports from any of the dark-plumaged varieties, and it is well known that such sports have come from both Bronze and Narragansett turkeys.

46. Development.—For many years White turkeys were considered too delicate for general-purpose breeding, and for this reason they received but little attention. Their recent development in America has greatly improved them.



White Turkeys

47. History.—At one time White turkeys were nearly obsolete. Later, more attention was bestowed on them, and white sports from Bronze and Narragansett turkeys were crossed with them. Continued crossing with white sports from other varieties strengthened their vitality, increased their size, and darkened their shanks and plumage. Defects in these respects have been removed by selecting the best offspring, and White turkeys are now proportionate in size to those of other varieties. They are strong and vigorous, and have pinkish-white shanks. More of them have been bred during recent years than formerly, and they have become a favorite variety for both exhibition and market.

48. Description.—White turkeys are heavier than the Black, Buff, or Slate turkeys. The Standard weight for mature males is 28 pounds; for young males, 20 pounds; for hens, 18 pounds; and for pullets, 14 pounds. Mature males sometimes reach a weight of 34 pounds; mature hens, 24 pounds; young males, from 22 to 24 pounds; and young females, from 16 to 17 pounds. Such unusual size may be attained only by the use of the largest hens for breeding purposes.

The beak, shanks, and toes are pinkish white; the eyes are brown, but not so dark as in other varieties; the plumage is white throughout. Pure white plumage without foreign color is unusual; the plumage is apt to show both creamy-white and dark markings. In all varieties of turkeys, except the White and the Black, white skin prevails. Some strains of the Black turkey have yellow skin and flesh. White turkeys bred directly from other varieties are likely to have flesh and skin conforming to the color of the parent stock. White turkeys having pinkish-white beak, shanks, and toes are almost certain to have skin of the same shade.

49. Mating.—To succeed in breeding White turkeys for exhibition, large hens weighing from 18 to 20 pounds, with pure white plumage, pinkish-white beak, skin, and feet should be mated with males of equal quality that weigh not less than 20 pounds when young, and from 26 to 30 pounds when matured.

Both should have well-proportioned bodies and perfect health. No ailing turkeys should be used for breeding purposes.

To improve size, strength, and vigor in the offspring, white-plumaged hen turkeys that have come as sports from the darker varieties may be mated with White males, and the male offspring that have pinkish-white beaks, skin, shanks, and toes may be bred directly into the flock. No attempt should be made to breed directly into a flock of White turkeys a male turkey with dark shanks. When such males are to be used, they should be mated with the best White females, and the offspring should be introduced through the use of the best females so produced. Male turkeys that have bad body formation and are deficient in color of beak, shanks, feet, or plumage are unfit for general use in a flock of White turkeys kept and bred for exhibition.

PEAFOWLS

VARIETIES

50. Peafowls are indigenous to Asiatic countries. They are plentiful in the large forests of India and inhabit the mountainous regions also. Their domestication has been recorded through many centuries, and their outline can be traced in ancient Greek paintings. Large numbers have been distributed to all parts of the world, and they have been domesticated in Europe and America. They seem to do best where the winters are not severe, yet they can be bred successfully in the Eastern and Middle States, and some have been bred as far north as Central Canada.

Four varieties of peafowls are recognized by persons who breed them for ornamental purposes. These are the *Black-Winged*, the *Common*, the *Javan*, and the *White*. Perhaps the Common and the Javan were the original varieties and the others were formed by sports from them.

51. Development.—Peafowls have not been developed by man. Those kept in domestication never equal the wild

varieties in their natural state. The only development they have received, or perhaps the only domestication, has been from keeping them in gardens and parks more for ornamentation than for use.

52. History.—P. Martin Duncan, M. P., F. R. S., F. G. S., of London, locates the original peafowls in India, where they are seen in large flocks. He says they are even more beautiful in a wild state than in domestication and that they frequent forests and jungle places, naturally thriving in hilly and mountainous districts. They come forth in the open glades and fields to feed in the morning and evening, retiring to the jungle for shelter during the heat of the day, and roosting at night on high trees. They ascend the Nilgiri Hills and other mountain regions in Southern India to an elevation of 6,000 feet or more, but do not ascend the Himalayas above 2,000 feet. Many Hindu temples have large flocks of peafowls, and shooting them is forbidden in some Hindu states. Peafowls breed according to the locality, generally from April to October.

BLACK-WINGED PEAFOWL

53. The **Black-Winged peafowl** has been known as the peafowl of Japan. It differs from the Common peafowl in having black wings burnished with a bluish-green tinge; the flight feathers of the wings are of a cinnamon color, striped with a darker brown or black; the plumage of the female is a grayish white, splashed with black.

COMMON PEAFOWL

54. Origin.—The **Common peafowl** is the variety most common in India. Fowls of this variety are found there in large numbers, and it is almost certain that they originated in that locality.

55. Development.—The Common peafowls have been developed only for domestication, and they can be kept in any locality where turkeys will prosper.

56. History.—It is said that long before the Christian era peafowl tongues were considered the daintiest of all dishes. If this statement is accepted as a fact, and there is no reason to doubt that such dishes were served at the banquets of ancients, it is amazing to think of the number of peafowls that would have to be killed in order to serve the guests at a single banquet.

57. Description.—The Common peafowl is not unlike the turkey in body formation. In head and neck it differs from the turkey in having a crest of twenty or more feathers on the top of the head and a growth of feathers over the head and neck. The females are more somber in color than the males and do not grow the long tail feathers so much admired in the males. The color of the female is mostly chestnut brown, shaded with bluish white; the flight feathers of both males and females are light chestnut color. The peculiar feature of the peacock is the long, flowing tail that grows from the back and spreads profusely, some of the feathers being of great length. These are called a train and are bluish green, shaded with a beautiful marking at the end of each feather. The body plumage is emblazoned with blue, and the thighs and sides are marked with gray.

58. Mating.—The only method of mating that can be applied to peafowls is to select the best and most beautifully plumaged fowls (not akin, if possible) and give them their freedom, either in a park or in an enclosure that is large enough to permit them to wander about. When kept in a small enclosure, one male and two or three females will answer best. Where they have the freedom of a large estate, twelve or fifteen females with as many or half as many males may be kept. When the number of males and females is the same they are likely to mate in pairs. Where there are more males than females there will be fighting in the flock. The female will hide her nest under brush or among bushes, and her mate will wander about, remaining close at hand during the period of incubation, and will help her care for the young when they are hatched.

Pea Fowl and Guinea Fowl

JAVAN PEAFOWL

59. The **Javan peafowl** is said to have originated on the island of Java, but there is no certainty as to this. The fowls of this variety are unlike those of other varieties, which would indicate that they are of a different origin than the others. They are said to inhabit both Siam and Borneo. They are larger than the Common peafowl, and both males and females have beautiful plumage, the gound color of which is green, emblazoned with coppery bronze, blue, and greenish blue. But few have ever been seen except on private estates or gardens where such fowls are kept for ornamentation. Although they might be bred in any locality where the winters are reasonably mild, there is no evidence that this has been accomplished.

WHITE PEAFOWL

60. The **White peafowl** had its origin in sports from other varieties. The fowls of this variety have pure white plumage and are very rare. A few have been seen in America, but they are more numerous in European countries. Whether or not they will breed true to plumage color has not been established, and it is impossible to affirm that they will produce their own kind. Evidence of their ancestry will be seen by holding before a strong light the tail feathers of the male. When this is done, the peculiar markings, or ocelli, of the darker varieties can be traced in outline.

GUINEA FOWLS

61. There are several varieties of **guinea fowls,** and it is claimed that all have been found in Africa. Whether they are all distinct varieties or whether some have come from intermingling two or more original varieties is not known. It is thought by some persons that the Pearl and Vulturine were the original varieties and that all others sprang from them. The best known varieties are the Pearl and the White. The Vulturine guinea is one of the most beautifully plumaged of all fowls.

PEARL GUINEA FOWL

62. Origin.—Guinea fowls are said to have originated in Africa. It is also claimed that they were found in other localities, but whether they were carried thence from Africa or were indigenous to those localities cannot be stated.

63. Development.—For centuries guinea fowls have been bred in many localities. They have been kept wherever man existed, but so little attention has been given to their breeding that it might be said that they are self-developed.

64. History.—In writing the history of guinea fowls, Moubray says: "According to mythology, the Meleagrides, the sisters of Meleager (son of Ceneus, King of Macedonia), who were cruelly put to death bewailing the death of their unfortunate brother, were metamorphosed into guinea fowls; the showers of tears they shed bedecked their otherwise sable plumage with white spots; and, were it not too grave a subject for jest, we should state that this melancholy origin may account for the mournful cry of 'come back,' which the guinea hen utters to this day."

Later writers styled the guinea fowls Numidian fowls. In Portuguese they are called Pintada, and in Spanish, Pentates, both words signifying *painted.* Later, they become known as

Pearly fowls, because of the pearl-like spots on their plumage. They are now called **Pearl guinea fowls.**

65. Description.—The body formation of Pearl guinea fowls is round and compact; the back is arched into a half circle from the shoulders to the tip of the tail; the neck is rather long in proportion to the body; the head is of medium size; the face, wattles, and helmet, which grows on top of the head in place of a comb, are red, burnished with purple; patches of white grow from the sides of the face and neck; the body plumage is slaty blue throughout, with pearl-like spots. The distinguishing features between the males and the females are the larger helmet and the more erect carriage of the male, and their habit of running about on tiptoe calling loudly.

66. Mating.—The mating of Pearl guinea fowls to produce large offspring with perfect color can be accomplished only by selecting the best that can be found, and mating and remating their offspring, always selecting the largest and best females.

VULTURINE GUINEA FOWL

67. Origin.—The **Vulturine guinea fowl** originated in Africa. It is the most beautiful of all the varieties that have been brought from that country. Guineas of this variety are rare, and but few have been brought to America.

68. Development.—But little is known of the habits of the Vulturine guinea fowls in their wild state, and only a few have been kept in confinement. Some kept by Homer Davenport, of New Jersey, became so tame that they would eat from his hand. They have been bred in Europe but never in America. It is thought that they could be established and would do well in Florida or Southern California. They are more beautiful than the common kinds of pheasants, and they would serve a better purpose in the destruction of bugs and be valuable as table poultry.

69. Description.—It is difficult to describe the Vulturine guinea fowl, since it does not conform in shape or plumage color

to any other variety of the family. It has been known as the Vulturine Royal Guinea, referring perhaps to its kingly appearance and to the shape of its head, which is fashioned much like the head of a vulture. About its neck and growing down over the shoulders and breast is a cape of long, pointed feathers, which have the appearance of a hackle. These feathers are beautifully colored, having white stripes down the center, with an edging of black finely dotted with white and bordered with blue; the feathers of the back are of similar form and color. The rest of the body plumage is said to be a blackish-brown, ornamented with pearl-like spots. Its appearance is that of a fowl clad in beautiful plumage with a long, flowing circle of feathers extending down the neck and on to the breast and back, covering the shoulders; and the entire body color is emblazoned with a rich, glossy polish, which at times reflects blue, purple, or a bluish-bronze sheen. The tail feathers are longer than those of the other varieties of guinea fowls.

70. Mating.—Man cannot select and mate Vulturine guinea fowls better than they will mate naturally. If two or three females and one or two males are kept in an enclosure they will live peaceably, but two pair kept in a small enclosure during the breeding season may quarrel. If the enclosure is large enough for each pair to have their own part and their own nest, many pairs may be kept. Guinea fowls can be acclimated in any country where the temperature is not colder than is it at night in the mountains of Africa, and where there is plenty of woodland, open fields, and natural food for them. If kept in confinement, special attention should be given to their health and to selecting females having size and vitality.

WHITE GUINEA FOWL

71. Origin.—The **White guinea fowl** is supposed to have originated from sports from Pearl guinea fowls.

72. Development.—To develop the White guinea fowls, white or nearly white fowls were selected, mated, and remated for the production of guinea fowls having white plumage.

73. History.—Naturalists state that wherever dark-colored peafowls, guinea fowls, or turkeys are bred, albino, or white, offspring sport from them. White guinea fowls are mentioned as having existed from the beginning of the domestication of guinea fowls.

74. Description.—The White guinea fowl has the same general body formation as the Pearl guinea fowl; the plumage is pure white; the shanks and toes are usually red, or red shaded with a darker color.

75. Mating.—The most that has been done in mating White guinea fowls has been to select for white plumage without regard to other conditions. A few have been selected for size, shape, and color, and in this way size has been improved. If more attention were given to selecting large females with perfect color and mating them with males of the best form and color that are not akin to the females, improvement would quickly follow.

OTHER VARIETIES OF THE GUINEA FOWL

76. A number of variety colors have come from intermingling or cross-mating Pearl and White guinea fowls. The **Gray guinea** has a ground color of grayish blue or dull lavender, irregularly spotted throughout. The **Mottled, or Pied, guinea** has a white breast and white wing flights, but otherwise it is quite like the Pearl guinea. There is a **Laced, or Black-Penciled guinea,** but it is exceedingly rare. It has a ground color of white, marked with black spots; some of this variety are said to have markings like the Sebright lacing in their plumage. At one time a **Black guinea** existed; this was so dark that the spots on the plumage were almost obliterated. In addition to these, there is a **Purple guinea,** which has a light purple shade throughout the plumage, marked with spots. Records show that all of these varieties have existed within the last two centuries.

Moubray mentioned a **Tufted, or Crested,** guinea. He stated that this was similar to the Pearl guinea fowl except in the head and neck, which were more like the head and

neck of a turkey, and that a tuft of feathers grew on the head, forming a black crest instead of a helmet; the feathers were spotted with grayish dots, the number varying from four to six on each feather. Whether this was a true variety or an unusual offspring from other varieties has not been told.

DUCKS AND GEESE

DUCKS

ORIGIN

1. Naturalists have claimed that the wild Mallard duck is the original from which all domestic ducks have descended, but they have failed to discover an ancestor for the Mallard. There are various kinds of wild ducks, but the Mallard is the only kind that has breed characters that conform to those in domestic ducks. The Mallard and the Rouen have the same general body formation and plumage color. The earliest illustrations show that the plumage of the wild or Mallard duck was the same then as now, and this color is strongly present in the Rouen breed. By careful selection and mating, the Rouen ducks have been made larger, more bulky in body formation, less agile, and less inclined to fly. Whether or not all ducks have descended from one original variety may never be known.

It is impossible to state definitely just how early the domestic duck was developed. The ancestors of the Aylesbury were perhaps the first variety of white-plumaged ducks, and they are said to have existed for centuries before their development or improvement began. All variety colors in ducks may have descended from one breed of wild ducks, for sports are as likely to come from them as from the black-red varieties of poultry. White offspring may have appeared centuries ago, and these, bred again with the Mallard, may have produced blue or fawn-colored plumage, and, as a natural result, other colors have been developed from them.

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All breeds and varieties of ducks have been greatly improved in size, body formation, and plumage color during the last century. The Call ducks, which were naturally small, have been reduced in size and beautified in plumage; the Muscovy, the Runner, and the newer varieties of Buff Orpington and Khaki ducks have been so improved within the last twenty-five years that they are favorites in many localities.

AYLESBURY DUCK

2. Origin.—The **Aylesbury duck** has come from white ducklings that from time to time have appeared among the offspring of wild varieties. An occurrence of this kind was reported as late as 1900. Three white ducklings came in a lot that had been hatched from wild duck eggs. The white offspring were bred together, and white-plumaged ducks were produced from them. Other such occurrences have been reported. The best of all the white-plumaged ducks that could be found in that locality were selected by duck growers living near the town of Aylesbury in England. They were bred, fed liberally, selected, and mated until a breed of white-plumaged ducks was established, having white bills and orange shanks and feet. The best offspring were selected, and in this way the breed was made and was named for the town in which the ducks originated.

3. Development.—Aylesbury ducks were first developed for exhibition by the fanciers of England. They were bred and improved, and they became famous for their beautiful form and clean, clear, white plumage. Large numbers of them have been bred and shown in England; fewer of them in America.

4. History.—Aylesbury ducks have been most highly considered for market poultry since prior to 1860. Beginning at about that time, large numbers were sold annually from the territory about Aylesbury, all of them being killed when 8 weeks old and sent to market at the season when they would bring the highest prices. Their popularity continued until they

AYLESBURY AND PEKIN DUCKS

were supplanted by the Pekin ducks. About 1870, the breeders of fancy ducks conceived the idea of making the Aylesbury beautiful for exhibition. Some were selected with reference to size and color and for light-colored bills and bright orange shanks. They were bred and fed until they attained enormous size, and in the exhibition hall they were for years even more popular than the Rouen. Since the coming of the Pekin ducks, the popularity of the Aylesbury has waned.

5. Description.—The Aylesbury duck appears to have a longer body than is usual with either the Rouen or the Pekin. This is caused by its straight and elongated back, with like formation along the breast line, giving the body the appearance of great length in proportion to size, which is large. The ducks weigh from 7 to 10 pounds, or more. The bill is white or flesh colored; the eyes, dark; the shanks and feet, orange; the plumage, pure white and free from creaminess or other foreign color. The beauty of the Aylesbury duck for exhibition is its snow-white plumage and pinkish-white bill, with shanks of a bright orange.

6. Mating.—In the mating of Aylesbury ducks, the largest males and females that have great length of body, pure white plumage, pinkish-white bills, and bright orange shanks and feet should be selected. Ducks of this quality that are 2 or 3 years old can be mated to yearling drakes that are as nearly perfect as possible.

All ducks will breed well if they are permitted to have the freedom of a range and swimming pool. But few will lay in nests or hatch their own eggs, and they will do this only when they have been taught. They should be housed at night and not released until about 10 o'clock each morning; by that time most of the ducks will have laid their eggs on the floor, which should be covered with straw. To be successful with ducks, the floor of the house must be sanitary, the straw must be removed and dried in the sun, the floor swept clean, strewn with sand to a depth of $\frac{1}{2}$ inch, and the dried or clean straw spread over this. A house suitable for ducks is shown in Fig. 1. If the ducks are permitted to run about without

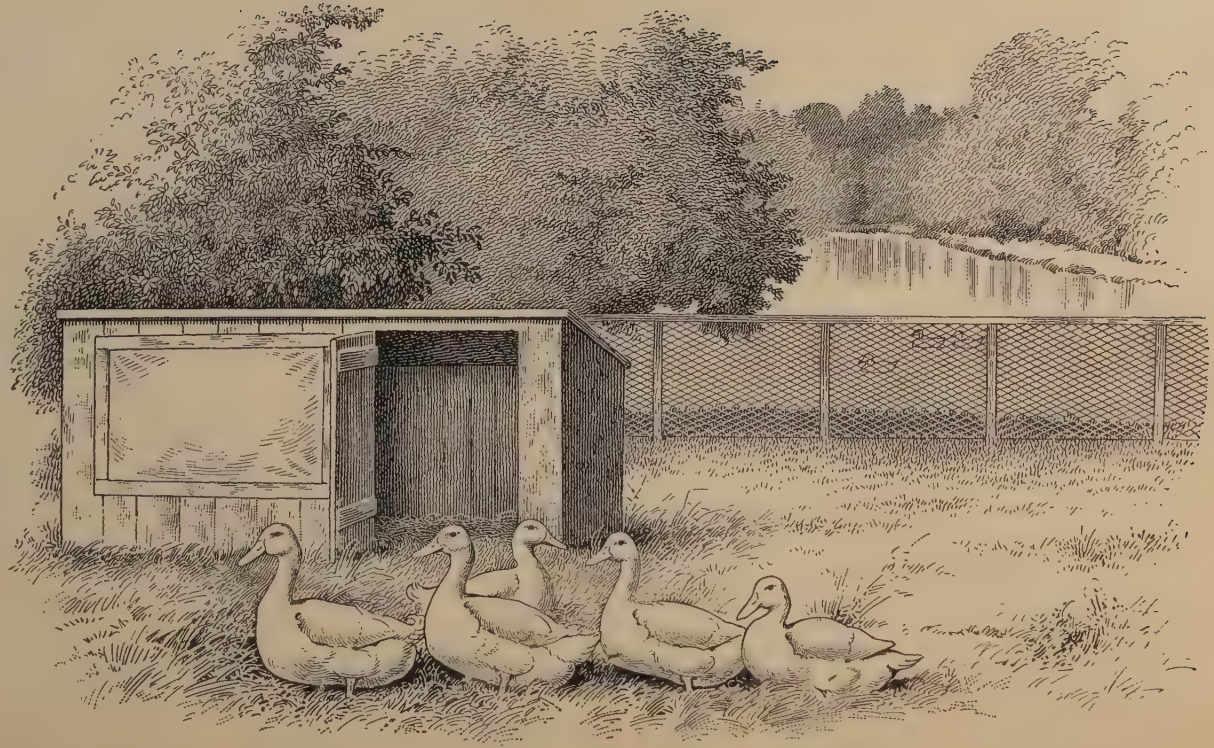


FIG. 1

restraint, most of the eggs will be lost on the ground or in the swimming pool. Eggs from ducks that have a swimming pool are more likely to be fertile and the ducklings will have more vitality than when they are deprived of this, or grown entirely on dry ground.

To teach ducks to lay in a nest or to hatch their own eggs, they must be hatched and reared by mother ducks, and from the beginning they must be shut into the house with the mother ducks at night. Nests should be made on the floor, and from this training some of the young ducks will acquire the habit from those that incubate their eggs. Some breeds of ducks do this naturally and others can never be taught to do it.

CALL DUCK

7. Origin.—The **Call duck** is a bantam duck that is said to have been made by selecting the smallest Mallard and small white ducks and breeding, inbreeding, hatching late, and rearing them on dry land with but little feed. In this way two varieties were made, one the Gray Call, which is colored like the Mallard; the other, the White Call, which has white plumage.

8. Development.—The Call ducks were developed from the smallest ducks that could be selected, with plumage color like the wild Mallard, and the smallest white ducks. Their offspring were remated for the purpose of reducing size and having bantam ducks of two varieties.

9. History.—Moubray stated that in early days there was a marsh duck in Norfolk, of a rather diminutive kind which resembled the Mallard both in appearance and plumage, and that in the cottager yards specimens of a small Dutch breed were frequently seen. These were of a pretty and peculiar appearance. The plumage was of a whole color, either a slaty-blue or dun shade, or a sandy-yellow or cinnamon, and sometimes it was like the color of a tortoise-shell cat. These were called Rotterdam ducks on account of having

been obtained from that place. Moubray further stated that the Call ducks, also from Holland, were very small, and that they were kept or valued only, as their name indicates, to serve as call, or decoy, ducks among artificial, or imitation, decoy ducks. They were of two sorts, one with pure white plumage and the other with a grayish-brown plumage like that of the Mallard.

10. Description.—There are two varieties of Call ducks. One, the **Gray Call,** has shape and plumage quite like that of the Mallard duck, dark-brown eyes, and a greenish-yellow bill with dark shading. The other, the **White Call,** has pure white plumage, bright-yellow or orange bill, shanks, and feet, and blue eyes. There is no standard weight for Call ducks—the smaller they are the greater their value.

11. Mating.—In the mating of Call ducks of either variety for the production of exhibition offspring, the smallest that can be found with perfect plumage color and markings, according to the variety, should be selected. Special attention should be given to having small females. From them, offspring may be bred that will be an improvement on the parent stock, provided the parent stock has been bred in line long enough to have established breed characters, color, and markings best suited to them.

CAYUGA DUCK

12. Origin.—The **Cayuga duck** is thought to have been made by crossing black ducks with the wild Mallard.

13. Development.—The Cayuga ducks have never been developed to any extent, except that they have been bred so as to free their plumage of foreign color and to make them into ducks that have black plumage throughout, and that breed reasonably true.

14. History.—About 1851 black ducks made their appearance on Cayuga Lake, New York. Later, they were distributed throughout America and England. Although they were first

brought into prominence in Cayuga County, New York, they are thought to have originated in South America from a black duck now called the Black East India.

15. Description.—Cayuga ducks average a pound less in weight than is required in Rouen ducks. Their bills, shanks, and toes are dark or black; the eyes, dark; the plumage, brilliant black throughout, glistening with sheen; the wing primaries may be tinged with brown.

16. Mating.—Large females that weigh from 7 to 9 pounds when 2 years old and from 6 to 7 pounds when yearlings should be mated with drakes 1 or 2 years old that average a pound heavier than the females. They must all have beautiful black plumage throughout, glistening with sheen. If the wing primaries of the females are overcast with brown, those of the males should be very dark. Special attention must be given to having perfect black surface and under plumage; this will avoid the appearance of gray or white in the offspring. The bills, shanks, and feet should be black, including the soles of the feet, with no indication of yellow or orange in them.

CRESTED WHITE DUCK

17. Origin.—The **Crested White duck** has been known for a long time. Early writers have stated that ducks frequently appeared with tufts of feathers growing on the top of the head. Some have mentioned the fact that these crests almost equal in size the white crests of the Polish fowls.

18. Development.—Crested White ducks have not been developed in large numbers. Only a few have been selected and bred for the improvement of size, shape, and color.

19. History.—Frequent mention has been made of white ducks that had feathers on their heads, and other breeds of ducks have occasionally been mentioned as having a crest. Crests have appeared in flocks of Pekin ducks that were bred for market. Some of the most beautiful crested ducks that

have been shown in America were selected from a flock of Pekin ducks that were bred in Pennsylvania for market.

20. Description.—Crested White ducks may have a body formation like either the Aylesbury or the Pekin. They have an upright carriage, yellow bills, shanks, and toes, dark or blue eyes, and pure white plumage throughout, with a crest of feathers growing on the top of the head. The crest should be round and evenly balanced, and should grow close to the top of the head. When there is too much space between the top of the head and the lower part of the crest, it is called a bouquet crest, because of the stem beneath. Mature drakes of this breed weigh 7 pounds; mature females and young males, 6 pounds; immature females, 5 pounds.

21. Mating.—Females that have true breed characters, pure white plumage, and perfectly shaped crests that are evenly balanced on the head should be selected and mated with males that equal them in quality. Crests that are too large are apt to lop over to one side. Offspring from such stock are liable to have the same defect.

EAST INDIA DUCK

22. Origin.—The **East India duck** is said to have originated in India.

23. Development and History.—The East India ducks have been known by many names, among them being Buenos Ayres, Labrador, Black East India, and Black Brazilian. They are thought to have come as sports from the Mallard ducks, and in many localities they are considered as identical with the Cayuga ducks. The English Standard describes the Cayuga, and the American Standard describes both the Cayuga and the East India. It is reasonable to suppose that all black ducks have come from the wild Mallard, their difference in size and plumage emanating from the influence or environment of the locality in which they were bred.

FAWN AND WHITE RUNNER DUCKS WHITE

24. Description.—East India ducks are of the same general appearance as the Mallard. They have an upright carriage and move quickly. Their plumage is a deep, rich black, with a brilliant green sheen; their bills are very dark; their eyes, shanks, and feet are black. The main differences between the East India and the Cayuga ducks are in size (the Cayuga being larger) and in richness of plumage color. It is claimed that ducks of either the Cayuga or the East India breed can be shown in either or both classes. The smallest offspring that have the most brilliant plumage may be shown as East India ducks, and the largest and less brilliantly colored offspring may be shown as Cayuga ducks.

25. Mating.—The best East India males and females should be mated, special attention being given to having their plumage black to the skin and brilliant with green sheen, the bills very dark green, and their shanks or feet very dark or black.

RUNNER DUCK

26. Origin.—The **Runner duck** has descended from originals that were brought from India, the first importations being made into England about 1835. It is claimed that ducks of the same type still exist in India, and that some of them were brought into England as late as 1906.

27. Development.—Although the general appearance of the Runner ducks is the same now as when they were brought from India, they have been changed, developed, and improved into better form and color, and a body formation best suited for prolific egg production.

28. History.—Runner ducks are generally known as Indian Runner ducks. This name was given to them on account of their place of origin and their habit of running about continually. Runner duck is an appropriate name for the breed and is the one adopted here. The ducks might properly be called fawn-and-white Runner ducks. When first brought from India, Runner ducks were valued chiefly for

their peculiarities and were bred in a careless manner until about 1890, when it was found that some of them laid about 14 dozen eggs in a year. A club was then formed and a standard made for them. Later, they were brought to America. About the same time special attention was given in Australia to breeding them for egg production, without regard to plumage color. Following this, a contróversy began concerning the color of plumage, one faction claiming that the English type was correct, the other making the same claim for the American type. In reality they are so much alike that it is difficult to distinguish between them. Some claim that only those laying white-shelled eggs can be considered pure; others insist that only those laying tinted-shelled eggs are of proper breeding. Scientific investigators state that eggs having white shells are proper for the Runner ducks. It has been asserted, without proof, that small Rouen females have been crossed into some strains of the Runner ducks.

29. Description.—An unmistakable feature of purity in the Runner ducks is their head formation, which is flat, long, and lean; they differ materially from other ducks in the crown of the head and the location of the eye. The head is so flat and lean as to give the eye the appearance of being almost on a level with the top of the skull, as shown in Fig. 2. English writers state that the long sweep of the top line of the head should be continued without an indentation or a break down to the tip of the bill, there being no dent even below the nostrils. The neck should be long, slender, and straight from the back of the head to its juncture with the body, the upper part being covered with short, fine feathers; the body should be long and narrow; the wings of medium length and carried close to the body; the back, straight from the shoulder line to the end of the tail; the breast, round, well proportioned, and straight from below the point of the shoulder to between the thighs. There should be a slight

FIG. 2

enlargement of the abdomen between and directly in the rear of the shanks, with a taper from there to the under point of the tail. The English Standard describes their body formation as like an old-style soda-water bottle.

The body color of both males and females should be fawn and white. The color of the head in the males should be dark, with cheek markings of a lighter shade, approaching fawn; the neck, white, without spots or markings. In the females the markings should be the same, except that they should conform in color to the remainder of the body, which should be fawn, with as little dark shading as possible.

The wing bows in the male are darker than those in the female; the under cut, or markings on the under part of the body, should be straight and distinct, the white extending beyond the vent; the primaries and secondaries, pure white; the rump may have dark shadings in the feathers; the main tail feathers may have a white under color. In close competition, black curly feathers have most consideration, but they may be either black, white, or mixed fawn and white. In young ducks the bill is lemon or orange colored, spotted with green. These spots gradually spread over the bill, and when the duck is 2 years old, the bill is cucumber green, with a black bean at the tip, slightly hooking over the lower mandible. This is especially true in the females, and any other color should count against the specimen. The shanks and feet in both males and females are orange red; the eyes are dark brown.

Neither the American Standard nor the English Poultry Club Standards recognizes dark markings in the female. They demand fawn and white as the only permissible colors. The fawn in the head of the drake is darker than in other parts of the body. Those having markings in plumage like that of the Rouen females are discarded under these Standards as unfit for the exhibition pen.

One English Club Standard states that the body markings of the females should correspond with those of the males, except in the shade of fawn, each feather having two distinct shades of fawn, with beautiful lacing and penciling and very faint lines of white dividing the two shades, especially in the

overlap. The neck and breast feathers should show the same penciling when handled and separated; the back and rump feathers should be a shade richer in color, but as the penciling is covered by the overlapping it is not in evidence when the duck is at liberty. The feathers of the tail should match the shade of color in the back and rump. White tail feathers are considered a defect. Ducks so marked should be described as a separate variety and not classed as fawn-and-white Runner ducks.

30. Mating.—For the production of exhibition Runner ducks, males and females that conform to breed characters and have perfect plumage color should be mated. To conform to the fawn-and-white type, the females should have fawn-and-white plumage, and the males should have the same colors of a slightly darker shade. If males with the darker shade of plumage color are used it will prevent the loss of color markings in the offspring. No males or females bred from females having penciling in the plumage should be bred into ducks of the fawn-and-white variety. To produce those having darker shades of color in the males and the pencilings in the females, males and females having color and markings as desired should be mated together. The males in this mating should be darker in shade of plumage color than the females with which they are mated. To establish in a strain the propensity for laying eggs having white shells, only eggs with white shells should be used for hatching. When mating for egg production only, females of the best body formation should be selected from strains that produce from 12 to 15 dozen eggs in a year.

WHITE RUNNER DUCK

31. Origin.—The **White Runner duck** was made by crossing fawn-and-white Runner ducks with a breed of white ducks, and they have come also as white offspring from the fawn-and-white variety.

32. Development.—The White Runner ducks have been developed through selecting the best from the cross-bred

Muscovy Ducks

varieties and mating them for form and color; but the greatest improvement has come from selecting, mating, and breeding in their purity the white offspring from ducks of the fawn-and-white variety.

33. History.—White Runner ducks are of recent origin, and the meager information that can be gathered relative to them has been given in their development.

34. Description.—White Runner ducks should have the same body formation and breed characters that are natural to those of the fawn-and-white variety. The color of their eyes is slate or blue; their bills, pale yellow; their shanks and toes, orange; the body plumage, white throughout. White offspring from the fawn-and-white variety are shown in the color illustration. These specimens have body formation fully equal to the best of the fawn-and-white variety.

35. Mating.—The most dependence can be placed in breeding White Runner ducks in a direct line through the white offspring of the fawn-and-white variety, or in selecting those having perfect breed characters, yellow bills, shanks, and feet, and beautiful white plumage. All ducks that have white plumage are more attractive when their bills, shanks, and feet are yellow.

MUSCOVY DUCK

36. Origin.—The **Muscovy duck** was found wild in South America; other than this its original source is unknown.

37. Development and History.—Early explorers of South America found the wild ancestors of the Muscovy ducks. Experiments made by cross-mating them with other breeds proved that they were a distinct species; such matings produced sterile offspring. They were formerly called Wild Musk ducks, and are occasionally called Brazilian ducks. They inhabited the wildest localities in South America, feeding in the marshes and lowlands and nesting in high places. Their early domestication cannot be traced. But little attention was given to

their improvement prior to 1870. Since that time they have been distributed throughout the world, and have been not only domesticated in America and European countries, but have been bred to form and color for exhibition. The females are kind and tractable, and the males under 2 years old may be controlled, but when older than this they are cross to children and during the breeding season they will savagely attack persons or animals that trespass on their domain and disturb them or their mates.

38. Description.—There are two varieties of Muscovy ducks, the Colored and the White. Both of these are of the same general body formation, the males being larger than the females. Their shape, size, composition, and color are shown in the color illustration. The Standard requires that the Colored Muscovy duck shall have a pink bill, shaded with dark or horn color; eyes, brown; shanks and toes, yellow, shaded with a darker hue, some being almost black; body plumage, lustrous black, emblazoned with sheen and marked with white, black predominating. The original, or wild, specimens were almost entirely black, and the other varieties are thought to have descended from them.

The White Muscovy duck has a pinkish-white bill, blue eyes, orange or yellow shanks and toes, and pure white plumage.

Some offspring having blue plumage somewhat like the Blue Swedish ducks have come from promiscuous crossing of the Colored and White Muscovy ducks. Also some having blue plumage barred with a darker shade have been bred from these varieties.

About the head and face of ducks of this breed is a growth like the caruncles on the head of a turkey. When they are young, there is but little of this; as they grow older, it increases until the head and face are overgrown with a heavy, red, corrugated formation. This is especially true of the males. Both males and females show a growth of feathers on the top of the head which they can elevate at will.

39. Mating.—When mating Muscovy ducks for exhibition, the breeder must make careful selection for color and

markings. In the Colored Muscovy ducks, black should predominate in both males and females. Special attention must be given to selecting females that are larger than the average.

In mating White Muscovy ducks, ducks with good breed characters, large size, and pure white plumage must be selected. To improve size, large females 2 years old or older should be used for breeding. These ducks will continue to breed for more than 12 years, and it is claimed that they have produced offspring when more than 20 years old. They prefer to select their nests, lay, hatch, and rear their own young, but they can be domesticated to such an extent that they will lay in coops, under boxes, or on the floor in the corners of a duck house.

PEKIN DUCK

40. Origin.—The **Pekin duck** was originally bred in China; its origin is unknown.

41. Development.—The Pekin duck has been developed largely in America.

42. History.—Pekin ducks were brought from China into both England and America about 1870. These ducks were distributed throughout the United States and made use of in breeding broiler ducks. Crosses were made with the Aylesbury ducks to increase size, improve table qualities, and invigorate the strain. A final sifting out of all but true Pekin ducks brought the greatest improvement.

43. Description.—Pekin ducks have moderately upright carriage with round, plump, and full breast and body. A peculiarity of this breed is the shape of the rear part of the abdomen. This is flat, having the appearance, in the female, of having been pressed up, as if molded in that position and held there. There is less of this in the male. The main tail feathers of both males and females have a tendency to turn up at the points. The long, straight body of the Aylesbury or Rouen is not correct for the Pekin. The bill, shanks, and feet are deep yellow or orange and free from black markings; the eyes are dark; the plumage is creamy white.

44. Mating.—In mating Pekin ducks for the production of exhibition offspring, it is necessary to select for breeders males and females that have breed characters strongly exemplified. The bills, shanks, and toes must be a rich, orange yellow; the plumage, as white as possible, with no creamy tinge on the surface. The males are usually larger than the females, and this should always be true in the breeding stock; the females should be large and well formed. Pekin ducks seldom become broody, and but few hatch and rear their young.

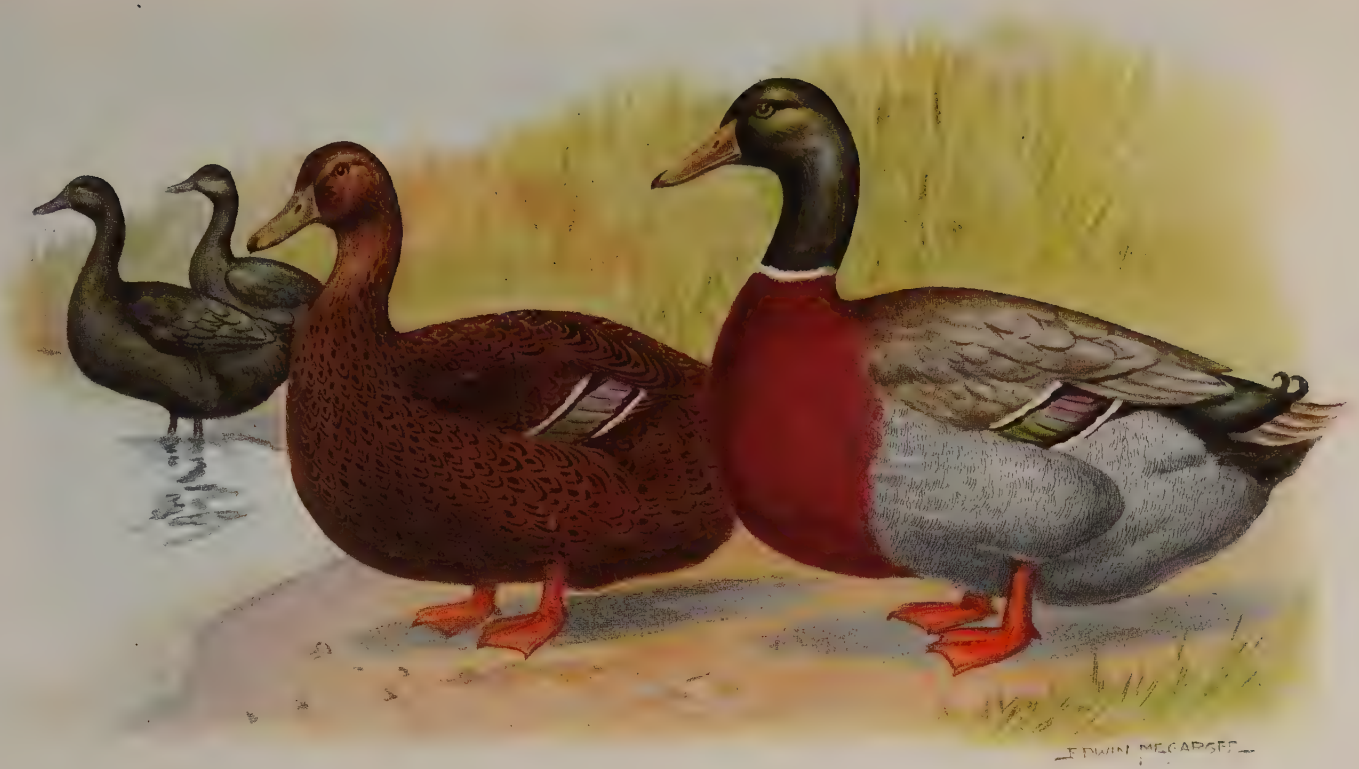
ROUEN DUCK

45. Origin.—It is generally conceded that the original home of the **Rouen duck** was Rouen, France.

46. Development.—The Rouen ducks have been developed from small ducks resembling the Mallard into one of the best ducks for the table and one of the most beautiful of all ducks for exhibition.

47. History.—Moubray mentions the Rouen as the first common duck that came into England, and states that it came from France. Others have claimed that it existed in many localities and was domesticated from the Mallard duck. These ducks have been known by many names, the most common being the Rhone and the Rouen ducks. They were developed in France, and were taken from there into England, where they were changed into large ducks having beautiful plumage color and markings, and exceptional quality as table poultry. They are generally used for crossing with other breeds, and their influence is visible in most of the ducks commonly bred for market.

48. Description.—The general appearance of Rouen ducks is shown in the color illustration. They have long, heavy body formation; full, deep breasts, and low-set keel. Their legs are short and their carriage is almost horizontal. In the males, the bill is green, shaded with yellow; the eyes are dark or hazel; the shanks and toes, dark orange red; the



Rouen Ducks

head and the neck to near the shoulder are a rich, brilliant green, bordered below with a ring of white; the breast is claret color, which extends down between the shanks, where it gradually changes to an ashy-gray shade, and spreads over the abdomen and up the sides in a line with the dark markings between the tail and the lower edge of the wings. The English Standard describes this as French-gray ground color, penciled with grayish black. The American Standard describes it as steel gray, penciled with black. The center of the back is of a gray shade conforming to that of the under-body color. This is bordered on both sides with a rich, lustrous green which extends to the wings. The flights are dark or brown; other parts of the wings are gray; the wing bars are bordered with white and very dark blue; the tail is brownish black, edged with white. The entire body plumage is rich in luster and sheen; the head of the males changes from glossy green to dark gray when the breeding season is over, and resumes its natural color in the fall.

In the female, the bill, shanks, and feet are orange; the eyes, dark; the plumage of head and neck is brown, shaded with darker colors from the top of the head well down on to the neck; the wing bars are quite like those of the males; the body plumage is brown, each feather penciled with a darker shade. This color extends from the throat throughout the entire body plumage. In the English Standard, the body plumage of the female is described as golden, almond, or chestnut brown; in the American Standard it is given as golden brown. The body of both males and females should have rich, brilliant plumage, and the colors should be well defined and distinctly separated. The size of the Rouen conforms to that of the Pekin and the Aylesbury.

49. Mating.—In mating the Rouen ducks for the production of exhibition offspring, equal attention must be given to the selection of color and markings with that required for breeding the most beautiful plumage color in Partridge Cochin fowls. Strains of Rouen ducks have been established that breed so true that but few offspring have to be discarded.

To establish a strain of this kind requires that a start shall be made with males and females selected from a strain of Rouen ducks that is known to have bred well for many years. To improve or strengthen a strain of this kind, large Rouen females that are perfect in color and markings can be safely bred into it.

Where Rouen ducks are most successfully bred, they hatch and rear their own young. An enclosure for this purpose is shown in Fig. 1. In such an enclosure a drake and three or four ducks are confined. Nests are made inside of the house for the females to lay their eggs and hatch their young. The yard will serve as an enclosure for them throughout the entire year. The house can be used as a laying and breeding house during the spring and summer months, and as a shelter during the winter months. When the ducklings are partly grown, the fence is extended to the swimming pool.

SWEDISH DUCK

50. Origin.—The **Swedish duck** is said to have come from Germany, and is thought to have had a common origin with all other blue ducks.

51. Development.—Swedish ducks, like all other blue-plumaged varieties, have been developed chiefly for market; a few have been bred for exhibition.

52. History.—The original of all blue ducks may have been the Blue Termonde, which originated in Belgium, probably from intermingling dark and light-colored ducks. Dickson mentions a variety of blue ducks found about Norfolk, England, and the Huttegem ducks, which are blue and white, are said to have been made by crossing Blue Termonde with Runner ducks.

Blue ducks were brought from Germany to America, where they have been bred, improved, and admitted to the American Standard as Blue Swedish ducks. Although they differ somewhat in body formation from other blue varieties, it is thought that all breeds and varieties of ducks with blue or with blue

and white plumage have been made by crossing the original Blue Termonde with other kinds, the difference in body formation resulting from the difference in the kinds mated with the Termonde.

53. Description.—Swedish ducks have body formation and carriage somewhat like the Rouen ducks, but they are smaller. The color of the bill in the male is dark willow green; that of the female is shaded with brown. The eyes of both are very dark; the plumage is a slaty blue, with a patch or apron of white on the lower part of the throat. The color of the male is darker than that of the female. The feathers should be laced with a darker shade; the shanks and toes are a grayish slate color.

The Blue Termonde has greater length of body than the Swedish ducks, a more extended breast, and a curved under body. The plumage color and markings are the same as in the Blue Swedish breed.

The Huttegem ducks are blue and have a long body formation. They are somewhat like the Runner ducks in appearance, except that their carriage is less upright. Their plumage is broken-colored blue and white; the throat and breast are white; the remainder of the body plumage is mostly blue and is marked with white at the ends of the flights and tail. Huttegem ducks are not regular in coloring; some show the influence of Runner ducks by fawn shadings in parts of their plumage.

54. Mating.—The chief difficulties to overcome in the breeding of blue ducks is the maintenance of color. Steel blue, as it is called in ducks, and slaty blue, as it is termed in Andalusian fowls, is very difficult to produce in a pleasing shade and maintain both color and proper markings. Black and blue are kindred colors in blue ducks. The edging of black must be separated from the more delicate shade of center plumage color. This has always proved to be a master task in all fowls that have dark lacing or dark or black edging bordering the plumage. To maintain such color and marking requires line breeding of the strictest character. No one can hope to produce blue ducks having steel-blue or slaty-

blue plumage, edged around with the darker shade approaching black, without breeding them so close in line according to the chart mating system as to establish a strain that will produce offspring true to color.

The softer shade of blue without dark edging is less difficult to produce, except that a large percentage of the offspring are likely to show considerable white and the most perfect of all so produced will have more or less white in the plumage. This is strongly represented in the Huttegem ducks, which are broken blue and white; the blue, a very soft tint, is best described as smoke blue or grayish blue color. To produce this shade of color and marking, males and females having a predominance of the blue color, which is considerably darker in the male than in the female, may be mated and the best offspring from such matings selected and used for breeding purposes.

To produce the darker shade and markings of the Andalusian color requires the selection of ducks that have the shade of color and markings desired and mating them to drakes having this same character and color a shade or two darker than the female. The head markings of the male should be of a very dark blue, approaching black; and both the male and female should have a small patch of white at the throat. As the white is apt to show more in the offspring than in the parent ducks, less than is desirable in the offspring should be present in the breeding ducks.

To produce offspring of the proper breed formation, ducks having this to a marked degree should be selected. Blue ducks may be bred to either the Rouen, Aylesbury, or Runner duck types. To produce any of these requires a careful selection of ducks and drakes that have the shape desirable in the offspring and the color and markings desired.

NEW BREEDS OF DUCKS

55. Several new breeds of ducks have been made within the last few years. Among the most prominent of these are the *Blue Orpington*, the *Buff Orpington*, the *Khaki*, and the *Partridge*. All of them have been made by cross-mating other breeds.

BLUE ORPINGTON DUCK

56. The **Blue Orpington duck** was produced by the intermingling of several breeds of ducks for the production of the Buff Orpington duck. The offspring from some of the crosses came with blue plumage color intermingled with white. These were selected and mated for the production of color, and the Blue Orpington ducks developed from them. They have the same breed characters as the Buff Orpington duck, and their color and markings are quite like those of the Swedish ducks. When mating them, the shape of the breeders must conform to that of the Buff Orpington duck; the breeders should be selected for color and markings the same as described for blue ducks.

BUFF ORPINGTON DUCK

57. Buff ducks came from matings made to produce Khaki ducks. Some offspring from the crosses showed a tendency to buff plumage; they were selected, mated, and their offspring remated for color. Mr. Cook, who originated the first buff ducks, claims to have produced them from the intermingling of Runner, Rouen, and Aylesbury ducks. He named the variety the **Buff Orpington duck** to conform to the name of his farm and his Buff Orpington fowls.

58. Origin.—The Buff Orpington duck was made by intermingling Runner, Aylesbury, Rouen, and black ducks. The buff offspring coming from these matings were selected and bred for color.

59. Development.—The Buff Orpington ducks were first developed for egg production, but little attention being given

to color and markings. Later they were bred and improved for exhibition color.

60. History.—The first Buff Orpington ducks were produced in England. Later other strains were made, some of which were started in Australia, where they were bred for egg production. They have been entered in competition with the fawn-and-white Runner ducks in the egg-laying contests held in that country. From there and from England they were brought to America, where they have been bred for exhibition and for egg production. They were brought prominently into public notice as exhibition ducks through having been exhibited at the Crystal Palace Show in England. About the same time they were introduced in like manner in both the United States and Canada, since which time they have been more carefully bred for the dual purpose of egg production and beautiful plumage for exhibition.

61. Description.—The shape or breed characters of Orpington ducks is a compromise between the Rouen and the Pekin duck. They have great length of body and are broad, deep, and well rounded in body formation. They are remarkable for length of breast and for the production of meat for table purposes. The drakes weigh from 7 to 9 pounds; ducks from 6 to 8 pounds. Their plumage color is described as an even shade of fawn-buff throughout. The upper portion of the neck and the head of the drake is several shades darker than the body plumage; the bill, yellow with a dark bean at tip; the shanks and feet, yellow or orange yellow; the eyes, dark, with a blue pupil. In fact, the body color of this variety is a mild shade of fawn-buff, the drakes having head color similar to the Rouen drakes. Their carriage is more upright than that of the Rouen, but not so erect as that of the Runner duck.

62. Mating.—In selecting Buff Orpington ducks for producing offspring of the richest plumage color, both the male and the female must have an even shade of rich fawn-buff having sheen or gloss upon the surface; the head of the drake

should be considerably darker than the body color; the bill, shanks, and feet, a bright orange yellow. Bodies of great length are to be preferred, as this is indicative of prolific egg production. The neck of the Buff Orpington duck is short in comparison with that of the Runner duck. This should be considered when selecting ducks for breeding purposes. Ducks of this character are apt to produce offspring that will be attractive for exhibition and prolific egg producers as well.

KHAKI DUCK

63. The **Khaki duck** is thought to have been made by crossing Rouen and fawn-and-white Runner ducks. Through these crosses, ducks were produced that resembled the Rouen in general body formation but were smaller and had Khaki, or buckskin, plumage color. It has been claimed that some of the best ducks so produced were selected and bred again with Runner ducks, and from such crosses were produced females of the Runner type having penciling in the back and body plumage, some of which were again crossed with Runner males to establish a variety of Runner ducks having more or less marking in the body plumage.

PARTRIDGE DUCK

64. The Partridge duck was produced from the matings made to produce the Khaki ducks. From the offspring produced from these matings specimens were selected which had color and markings resembling the partridge color in poultry. These offspring were mated and remated until a variety color was established, the drakes having color and markings somewhat like the Mallard, and the females resembling in color and markings the Brown Leghorn females. These, like the Khaki and the Orpington ducks, were developed for egg production, no attention being paid to color or markings other than to have them distinguished from the other breeds. But few of them have been bred even in their native land of Australia. They belong to the class of ducks that have been

bred there for egg production and they, like others, have become popular from the fact that they have produced more than 12 dozen eggs per year, some of them being credited with having produced as many eggs as have been produced by the Runner and Orpington ducks.

GEESE

ORIGIN, DEVELOPMENT, HISTORY, AND DESCRIPTION

65. Origin.—Nothing definite is known of the origin of geese. They were domesticated many centuries before the Christian era. They were sacred to the goddess Juno, and it was regarded as a sign of her favor that in 365 B. C. they aroused the Roman soldiers and saved the capital city. Italy seems to have been the home of domestic geese, and although they have been mentioned since the beginning of history, no reference has been made to the originals from which they descended. Scientists refer to the Graylag goose as the ancestor of all domestic geese. This may have been suggested by the fact that such geese have been known to exist for centuries, and all of the earlier geese were gray or gray marked with white.

White-plumaged geese were not mentioned in early days. There is a legend to the effect that a small, white swan was wounded and dropped into a lake where domestic geese were kept. Being unable to fly, the swan remained with the geese, all of which were gray. Later white-plumed offspring were hatched and were named Snowdrops. In this way white geese are said to have originated—doubtless a fanciful origin.

66. Development.—The earliest development of geese was directed toward having them of attractive appearance and for the advantages derived from their feathers. But little attention was given to them other than to have them beautiful, so that they might be a credit to the goddess Juno, to

Canadian and African Geese

whom they were held sacred. Later, they were selected and separated into variety colors, and following this, different breeds were made.

67. History.—Geese are said to have been held sacred in Egypt more than 4,000 years ago, and they have been connected with many of the historical events of the world. They are credited with having attained the age of a century, and were considered as oracles, because they would announce the coming of storms and unusual occurrences. At the beginning of the Christian era, the agriculturists of Rome gave special attention to rearing geese for domestic purposes, some of which were later sent to England. Although it may not be safe to say that domestic geese, as we now have them, originated in England, they were made in that country.

68. Description.—The body formation of geese has changed so little as to make the statement credible that they are the same today as they were 1,000 years ago. The earliest illustrations of them show about the same body formation that exists today in the common goose. There is so little difference in the formation of the Embden and the Toulouse as compared with the common goose as to suggest that the former are an enlarged product of the latter. The color of the geese in early days was gray, and gray and white; a slight reference is made to geese with black plumage. A natural conclusion is that the early geese were very dark gray approaching black, light gray, and gray mixed with white. This description would account for the three colors mentioned. They are said to have weighed from 4 to 12 pounds each. Such records might refer to both ducks and geese, since both were known as water fowl. Two varieties of geese are described as having existed in Italy; one was white, with bill, shanks, and feet of an orange color; a pair weighed from 20 to 24 pounds. The other variety had broken colors, white and gray; otherwise the geese were like those of the white variety.

AFRICAN GOOSE

69. Origin.—The **African goose** is claimed to be native to Africa; it is regarded as a distinct breed, and was named for its place of origin.

70. Development.—The African geese have been developed in America, where they have been made from originals of questionable quality into one of the best breeds of geese.

71. History.—The African geese have also been called Hongkong geese; they are sometimes confused with the brown Chinese variety. The theory has been advanced that the African geese were produced by crossing brown Chinese with Toulouse, and improving the offspring by selection. Edward Brown, of England, states that they were made in Africa by crossing the brown Chinese with some other breed, perhaps the Toulouse, and were then brought from Africa to America. However this may be, they are one of the most highly considered of all breeds of geese, and are bred in some localities for market.

72. Description.—The body formation of African geese is plump and compact, having both length and depth; the neck is fairly long; the head, long, broad, and deep, with a strong bill, and a considerable knob at the base of the bill in front of the eyes, and a prominent dewlap. The head, bill, and knob of both males and females are very dark or black; the eyes, dark; the body plumage, gray, lighter in the breast than in other sections; there is a dark line down the back of the neck, reaching on to the shoulders; the shanks and feet are dark orange. Adult males weigh 20 pounds or more; young males and adult females, from 16 to 18 pounds; young females from 12 to 14 pounds. This breed of geese has a dewlap growing beneath the bill down on to the throat. This is more prominent in the males than in the females, but it becomes quite prominent in both as they advance in years. Offspring less than a year old may have but little knob, and so little dewlap as to be imperceptible.

White and Brown Chinese Geese

73. Mating.—In selecting African geese for breeding purposes, the body formation should receive marked attention. The breast and the under part of the body should be prominent; the head points and breed characters must be well displayed, and the plumage should be a soft, attractive shade that inclines toward yellow rather than toward a smutty shade of gray. The stripe of dark gray or brown that begins on top of the head and continues down the back of the neck to the shoulders should be very pronounced. No male or female of this breed should be used in mating unless breed characters are so marked as to stamp it on sight as an African goose.

CHINESE GOOSE

74. Origin.—The **Chinese goose** is of two varieties; both originated in the Oriental countries and are credited to China.

75. Development.—The Chinese geese were first developed in China and India, and from those countries were scattered throughout the world. The most recent improvement in these geese has been made in England and America.

76. History.—The Chinese goose has been known by various names, among them China, Knob, Hongkong, Asiatic, Guinea, Spanish, and Polish. Many kinds of geese may have been included under these names. They were separated into two varieties, the Brown and the White, and were named Chinese geese. During recent years many of them have been bred for market, and they have also been selected and bred for beautiful plumage color.

77. Description.—The peculiar form and general appearance of the Chinese geese is shown in the color illustration. The Brown Chinese geese have color and markings the same as the African geese, except that the Chinese are darker. The White Chinese geese have pure white plumage; the bill, knob, shanks, and toes are orange; the eyes are blue. Geese of both varieties have a knob with but little or no dewlap until more than a year old.

78. Mating.—Two methods of mating are practiced for the breeding of the two varieties of Chinese geese. One method of mating is used for the production of small geese that conform to standard weights, which are 12 pounds for mature males, 10 pounds for young males and mature females, and 8 pounds for young females. For such matings, small mature females are mated with males that are proportionately small. In the other method of mating, which is used for obtaining larger offspring than would naturally be produced in this breed, the largest geese are mated with large males of the same variety. By the selection of the small females, geese that are small and trim are produced for exhibition. From the other matings, market geese are bred. In each kind of mating, color and markings must conform to standard demands, and breed characters must be conformed to without the slightest deviation.

EGYPTIAN GOOSE

79. Origin.—The **Egyptian goose** was first found wild in Africa. The Egyptian geese were plentiful along the Nile, and were well distributed throughout Egypt.

80. Development.—The development of the Egyptian geese was brought about by their domestication. But little trouble was experienced in accomplishing this, and the Egyptian is now numbered among the standard varieties of geese.

81. History.—The Egyptian geese are said to have been held sacred by religious orders. It is thought that their outline can be traced on the tombs and sarcophagi of ancient times. They have been gradually distributed throughout the world, and are bred principally for their beauty.

82. Description.—The Egyptian geese are unattractive in form but have beautifully colored plumage. They have long shanks and upright carriage. Their body plumage is a mixture of gray and black, emblazoned with rich metallic luster; their breasts are shaded with chestnut and buff. Most of their plumage is marked and stippled with a darker shade

Embden Geese

of color. They have reddish-blue bills and reddish-yellow shanks and toes.

83. Mating.—Male and female Egyptian geese are so nearly alike in body formation and plumage color that it is difficult to distinguish between the sexes. They prefer to mate in pairs, and if two or three females are kept with one male, he may mate with all, or he may refuse to notice more than one. If more males than females are kept in a flock during the breeding season, they will quarrel continually. Egyptian geese will breed in confinement, but they are so ill-natured that they cannot be kept in confinement with other breeds. They will build their own nests, lay 6 or 8 eggs, sit on them for 4 weeks, and when the goslings are hatched will care for them. Geese of this breed are kept more for ornament than for any other purpose, and should be fed and housed the same as other wild varieties.

EMBDEN GOOSE

84. Origin.—The original **Embden goose** came from Holland, where the breed was made by intermingling large white Italian geese with other white geese. Some were taken from Holland into England, where they were bred and improved.

85. Development.—The early development of the Embden geese was for improvement for table use. They were bred and fed for increased size, and were selected later and beautified for exhibition.

86. History.—The Embden geese were named for a town in Hanover. The same kind of geese were brought to America and were named Bremen geese, having come from the port of Bremen in Germany. Later, they were named Embden geese, and as such they have been admitted to all Standards.

87. Description.—Embden geese are large and beautifully formed. The under part of their body is crescent or canoe shaped; their backs are fairly straight; their bodies are

rounded and well proportioned. They should not grow a dewlap until they are several years old, and even then the dewlap should be small. Loose skin that hangs in pouches under the body is undesirable in this breed of geese. Embden geese have blue eyes, orange bill, shanks, and toes, and pure white plumage. They are of medium size, the males weighing from 18 to 20 pounds according to their age, and the females from 16 to 18 pounds.

88. **Mating.**—When mating Embden geese for the production of market poultry, size and vigor are the chief considerations. When mating them for the purpose of producing offspring for exhibition, large females that have bright orange-colored bills and shanks and pure white plumage should be selected and mated with young males that are large and have perfect color; both males and females should be entirely free from dewlap or loose pouches of skin under the body. Perfect body formation should have the greatest consideration when the breeding stock is selected.

To increase size in Embden geese, mating with the Toulouse geese has been resorted to. From such crosses, large white geese have been produced, but such offspring are apt to have such defects as dewlap, dark feathers in body plumage, and a smoky appearance in the under plumage. Geese that have been so produced will, in their second year, show the peculiar pouchy appearance in the under part of the body that is so marked in the Toulouse geese. All such defects should be avoided in selecting breeders to produce the best quality in Embden geese.

TOULOUSE GOOSE

89. **Origin.**—The **Toulouse goose** was made by selecting the best from among the original gray variety and improving them by breeding and feeding for size and color.

90. **Development.**—Toulouse geese were first developed in France. They were greatly improved in England, and are plentifully bred in America. They are the largest of all domestic geese, and are highly valued for their many uses.

Toulouse Geese

91. History.—In early days, Toulouse geese were selected and bred only for market. They have since been adopted throughout the world, and have been both crossed with other breeds of geese and bred in their purity.

92. Description.—The most useful type of Toulouse geese is shown in the color illustration. Form and color are displayed without an unusual amount of dewlap, and but little pouchiness on the under part of the body. Toulouse geese are both light and dark gray, marked with white. The upper part of the body, about the abdomen, is very light gray—almost white. Their eyes are brown; their bills, shanks, and toes are deep orange. Mature males weigh 25 pounds; immature males and mature females, 20 pounds; immature females, 16 pounds. These weights can be increased by selecting and feeding for speedy growth.

93. Mating.—Toulouse geese reproduce true to form and color. For the production of exhibition stock, large, mature females that have a perfect body formation should be mated with males 1 or 2 years old that are not only large but are perfect in form and color, and have a rich glossy plumage. Toulouse geese will continue to breed for many years, but it is always desirable to use males that are less than 4 years old. The females may be used as breeders as long as their eggs are fertile.

WILD, OR CANADIAN, GOOSE

94. Origin.—The **Wild**, or **Canadian, goose** originally existed in a wild state in the northern parts of America.

95. Development.—The Wild, or Canadian, geese have been captured, their wings pinioned to prevent their flying, and bred in domestication. Their size has been increased by care and regular feeding.

96. History.—Large flocks of wild geese like those of Canada existed in many parts of the world. Some were captured and confined in parks for ornamentation. Following this, they were bred in domestication, and later they were

crossed with other breeds; from such crosses, the mongrel hybrid geese have been produced.

97. Description.—The Wild, or Canadian, geese have long, slender bodies, and long, slim necks. Their bills, shanks, and toes are black; their neck is black, with white markings about the throat; their body plumage is dark, marked with gray; the under plumage of the rear part of the body is mostly white. Mature males weigh 12 pounds; young males and mature females, 10 pounds; immature females, 8 pounds.

98. Mating.—Wild, or Canadian, geese will mate in pairs and will be constant in their domestic relations. Sometimes they will mate with geese of other breeds, and when this occurs they are as constant as with their own kind. When left to themselves they will select their mates, build their nests, and rear their young.

When they are bred true, special attention must be given to selecting large males and females that have the most attractive plumage color. The difference that exists among them is that some have plumage of a more brilliant finish than others. The more brilliant plumage results from a better environment and proper feeding, and the reverse is caused by lack of care.

To keep geese of this breed in confinement, the first joint of the wings from which the flight feathers grow must be severed. This is called pinioning, and is practiced with all kinds of wild water fowl that have their liberty in domestication.

NEW BREEDS OF GEESE

99. An attempt has been made to create a breed of geese with buff-colored plumage. This has been accomplished with a slight degree of success. Those so far seen are yellow or cream colored, with deeper buff markings on the back and wings and on parts of the breast. But few of these have been shown, and their cultivation has been so slight as to attract but little attention.

A SERIES OF QUESTIONS

Relating to the Subjects Treated of in This Volume.

It will be noticed that the questions contained in the following pages are divided into sections corresponding to the sections of the text of the preceding pages, so that each section has a headline that is the same as the headline of the section to which the questions refer. No attempt should be made to answer any of the questions until the corresponding part of the text has been carefully studied.

ENGLISH FOWLS

EXAMINATION QUESTIONS

(1) Name the varieties of Dorking fowls.

(2) Describe the color and markings of the Colored Dorking.

(3) Describe the color and markings of the Silver-Gray Dorking.

(4) What kind of combs do White Dorking fowls have?

(5) What were the first two varieties of Dorking fowls?

(6) By whom were Orpington fowls originated?

(7) What breeds were used for making the Black Orpington?

(8) How was the Single-Comb Buff Orpington made?

(9) What other English fowl resembles the Buff Orpington?

(10) What is the color of the skin and flesh of Orpington fowls?

(11) How was the Single-Comb White Orpington made?

(12) What recent crosses show in the type of the White Orpington?

(13) Describe the plumage color of the Jubilee Orpington.

(14) Describe the new variety of Orpington called the Columbian Orpington.

(15) What is the plumage color of the Scotch Gray fowls?

(16) Describe the Scotch Dumpy.

(17) Where were the Sussex fowls originated?

(18) What are the variety colors of Sussex fowls?

(19) Describe the Light Sussex fowl.

(20) To what fowls are the Sussex fowls allied?

FRENCH, POLISH, AND MISCELLANEOUS FOWLS

EXAMINATION QUESTIONS

(1) What country first gave marked attention to the production of poultry?

(2) What is the oldest standard-bred fowl of France?

(3) How were Houdan fowls supposed to have been made?

(4) Describe the style of comb: (*a*) for the Houdan of France; (*b*) for the Houdan of America.

(5) What color predominates in the American Houdan?

(6) For what qualities have the La Bresse fowls long been noted?

(7) In what respects have the fowls of France been improved more than in any other country?

(8) What are the peculiar features of the Faverolle?

(9) Describe the peculiarity of plumage color in White-Crested Black Polish.

(10) What is the chief difficulty in breeding White-Crested Black Polish fowls?

(11) How were Buff Laced Polish fowls produced?

(12) Describe the color and markings of the Buff Laced Polish.

(13) Describe the color and markings of the Bearded Golden Polish.

(14) Describe the difference between the Bearded and the Non-Bearded Golden Polish.

(15) (*a*) What is the color of the Bearded Silver Polish? (*b*) What are their color markings?

(16) Describe the Bearded White Polish.

(17) In what locality did Sultan fowls originate?

(18) From what peculiarity has the Frizzle fowl derived its name?

(19) Where were Silky fowls originated?

(20) Describe the peculiarity of Yokohama fowls.

GAME FOWLS

EXAMINATION QUESTIONS

(1) (*a*) How are game fowls classed in the American Standard? (*b*) How are they classed in the English Club Standards? (*c*) To what do the modern game fowls of England conform?

(2) From what two varieties were the Birchen Game fowls made?

(3) What are the plumage colors of the Birchen Game fowls?

(4) How were Black Game fowls originated?

(5) What fowls were used to assist in developing length of leg in the modern Black-Breasted Red Game fowls?

(6) Describe the color and markings of the Black-Breasted Red Game fowls.

(7) (*a*) What is the plumage color of the Brown-Red Game fowls? (*b*) How are they marked?

(8) How were the Duckwing Game fowls made?

(9) What are the two varieties of Duckwing Game fowls?

(10) Describe the plumage color of: (*a*) the Silver Duckwing female; (*b*) the Golden Duckwing female.

(11) In breeding Pyle Game fowls, how may color and markings be improved?

(12) (*a*) What is the color of the shanks and beak of White Game fowls? (*b*) Describe their plumage color.

(13) For what purpose are Silver Wheaten Game females used?

(14) Where were the Cornish Game fowls originated?

(15) Who originated and developed the Cornish Game fowls?

(16) What are the Cornish Game fowls called in England?

(17) What is the latest color description for Cornish Game females?

(18) How were White Cornish Game fowls originated?

(19) By whom and where were White-Laced Red Cornish fowls originated?

(20) What is the supposed ancestry of the Malay fowls?

(21) Who developed the Malay Game fowls?

(22) From what locality were Sumatra Game fowls brought to America?

(23) From where were Aseel fowls brought to England and America?

(24) What kind of comb has the Aseel fowl?

(25) From what breed of fowls have Old-English Game fowls descended?

MEDITERRANEAN FOWLS

EXAMINATION QUESTIONS

(1) In what locality were all Mediterranean fowls originally found?

(2) What color and markings are correct for Anconas?

(3) (*a*) From what system of crossing was the blue plumage of Andalusians established? (*b*) In mating Andalusians, what feature is most discouraging?

(4) Describe the color of shanks, toes, and plumage of Black Leghorns.

(5) Describe the plumage color of: (*a*) Brown Leghorn males; (*b*) Brown Leghorn females.

(6) (*a*) Name the methods of mating necessary for the production of Brown Leghorns. (*b*) What kind of males should be used in the pullet-breeding line? (*c*) What special requirements are necessary for mating Rose-Comb Brown Leghorns?

(7) (*a*) In mating Buff Leghorns, what rules must be followed for producing golden-buff color? (*b*) What methods are applied in mating Rose-Comb Buff Leghorns?

(8) Describe the difference in color of Silver Leghorns in America and in England.

(9) (*a*) When was the present type of Leghorn originated? (*b*) Describe the difference in development in America, England, and Australia.

(10) (*a*) How are White Leghorns selected for mating for exhibition offspring? (*b*) Describe the tail plumage of both males and females desirable for producing exhibition offspring.

(11) Describe the proper comb for a Leghorn male.

(12) (*a*) What is the difference between Single-Comb and Rose-Comb White Leghorns? (*b*) How are fowls of the rose-comb variety selected for matings?

(13) Tell how fowls of the following Leghorn varieties are mated to secure the best results: (*a*) Blue Leghorns; (*b*) Cuckoo Leghorns; (*c*) Partridge Leghorns; (*d*) Pyle Leghorns.

(14) Describe the difference of development in the Single-Comb Black Minorcas in America and in England.

(15) How should Single-Comb Black Minorcas be selected: (*a*) for producing cockerels? (*b*) for producing pullets?

(16) (*a*) What differences exist between the Single-Comb and the Rose-Comb Black Minorcas? (*b*) What special attention must be given to mating the rose-comb variety?

(17) Describe the differences in color between: (*a*) the Single-Comb and the Rose-Comb Black Minorcas; (*b*) the Single-Comb and the Rose-Comb White Minorcas.

(18) Describe: (*a*) Barred Minorcas; (*b*) Blue Minorcas.

(19) (*a*) When and where were White-Faced Spanish fowls originated? (*b*) Name the varieties of them that have existed. (*c*) What are they now called?

(20) What kind of fowls must be selected and mated to produce exhibition White-Faced Black Spanish?

BANTAM FOWLS

EXAMINATION QUESTIONS

(1) As a rule, what is the relative size of bantams as compared with the larger fowls?

(2) How was the modern Booted Bantam made?

(3) How was the Brahma Bantam made?

(4) How was the American type of Dark Brahma Bantam originated?

(5) How was the Light Brahma Bantam made in America?

(6) What variety of Cochin Bantam was first brought from China?

(7) Describe the plumage color of the Black Cochin Bantam.

(8) (*a*) How was the first even shade of buff produced in Buff Cochin Bantam males? (*b*) What is the proper color for Buff Cochin Bantams?

(9) How was the Partridge Cochin Bantam made: (*a*) in England? (*b*) in America?

(10) How was the White Cochin Bantam made?

(11) Describe the color and markings of the Cuckoo Cochin Bantam.

(12) How was the Game Bantam made?

(13) How can excessive lacing in the breast of the Birchen Game Bantam be prevented?

(14) How was the Black Game Bantam made?

(15) (*a*) Which section of the leg should be longer in a Game Bantam? (*b*) How should the tail of a Game Bantam female be set?

(16) What are the plumage colors of the Brown-Red Game Bantam?

(17) What kind of Duckwing Game Bantam will be produced from Silver Wheaten Game Bantam females?

(18) Describe the colors of the Red Pyle Game Bantam.

(19) (*a*) What varieties of Japanese Bantams are recognized in the American Standard? (*b*) What additional varieties are described in the English Standard?

(20) How was the Malay Bantam made?

(21) (*a*) How was the present type of the Black Rose-Comb Bantam made? (*b*) How was the White Rose-Comb Bantam developed?

(22) (*a*) When and by whom were Sebright Bantams originated? (*b*) What are the two varieties of Sebright Bantams?

(23) How are Silver Sebright Bantams mated for best results?

(24) How were Silky Bantams made?

(25) How were Frizzle Bantams made?

FOWLS OF THE PHEASANT FAMILY

EXAMINATION QUESTIONS

(1) Where and how was the Norfolk Black turkey developed?

(2) How can pedigree breeding be applied to turkeys?

(3) Where is it thought that the Bourbon Red turkey originated?

(4) How was the Bronze turkey originated?

(5) How was the Bronze turkey developed?

(6) What kind of turkey hens should be selected for breeding purposes?

(7) Describe the plumage color of the Buff turkey.

(8) From what wild variety is the Narragansett thought to have descended?

(9) Describe the difference in body formation between the Narragansett and the Bronze turkeys.

(10) Which is the most beautiful coloring for the Narragansett turkey?

(11) How was the Slate turkey originated?

(12) In what country is the White turkey supposed to have originated?

(13) What are the Standard weights for turkeys?

(14) Where did peafowls originate?

(15) To what extent have peafowls been developed?

(16) Where can peafowls be kept?

(17) (*a*) Where did guinea fowls originate? (*b*) What two varieties of guinea fowls are most common?

(18) What is the body formation of the Pearl guinea fowl?

(19) Where might Vulturine guinea fowls be successfully bred?

(20) Describe the White guinea fowl.

DUCKS AND GEESE

EXAMINATION QUESTIONS

(1) How should all ducks be housed and cared for in order to save their eggs?

(2) How are ducks taught to lay in nests?

(3) What kind of Call ducks should be selected for mating?

(4) What special attention must be given to the mating of Cayuga ducks?

(5) Describe an unmistakable feature of purity in Runner ducks.

(6) How were White Runner ducks made?

(7) (*a*) Where were Pekin ducks originally bred? (*b*) Describe a peculiarity of this breed. (*c*) What is their plumage color?

(8) (*a*) From what were the Rouen ducks developed? What is the plumage color of the female as described: (*b*) in the English Standard? (*c*) in the American Standard?

(9) How may a strain of Rouen ducks be improved?

(10) What may have been the original of all blue ducks?

(11) What breed is thought to have been the ancestor of all domestic geese?

(12) Where were the African geese developed?

(13) Describe the peculiarity of African geese as to neck and body formation.

(14) (*a*) Describe the difference between the brown Chinese and the African geese. (*b*) Are large or small Chinese geese preferred for exhibition?

(15) (*a*) Describe the body formation of the Embden geese. (*b*) Should they have a dewlap? (*c*) Should they grow pouches on the under part of the body?

(16) What kind of Embden geese should be selected for producing the best exhibition offspring?

(17) (*a*) In what manner were the Toulouse geese originated? (*b*) Where were they improved?

(18) Which is the largest of all domestic geese?

(19) (*a*) How should Toulouse geese be selected and mated to produce the best offspring for exhibition? (*b*) How long will they continue to breed? (*c*) How long should males and females be used for breeding purposes?

(20) (*a*) Describe the Wild, or Canadian, geese. (*b*) How are they prevented from flying?

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